THE
HANDY BOOK
OF
THE HOUSEHOLD:

CONTAINING USEFUL INFORMATION
ABOUT

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HANDY-BOOK
OF
THE HOUSEHOLD.

THE

HANDY BOOK

OF

THE HOUSEHOLD:

CONTAINING USEFUL INFORMATION ABOUT

Beds, Bleaching, Boxes, Boots, Carpets, Curtains,
Disinfectants, Dyes, Domestic Matters, Fabrics,
Filters, Firewood, Furniture, Glass, Gloves,
Kitchen Ware, Lamps, Mats, etc

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BEDS AND THEIR COVERING.

Blankets, *Airing.*—A practical housewife says "I find it an excellent plan every week or two to hang blankets and other bedding on the clothes line and let them have all the atmospheric benefits of a clear, breeezy day. One's sleep is so refreshing if the bed is fresh. Woollens especially are great absorbents, and though they do not look soiled as linens and cottons do, they need a bath of air and sun as often as linens do of water."

Feather Beds.

Airing.—For beds which have been in only occasional use for a year, a day's airing on a sunny, breezy day, and a thorough beating with a stick are all sufficient; but those which have been in constant service for considerable time require the application of water in some manner. People who have access to an establishment where this business is done by machinery, generally prefer to avail themselves of it, and by a small payment have the task taken off their hands. But for those who must do the renovating at home. the following are the modes of precedure:

Washing.—One method is a thorough immersion and cleansing of the whole bed in hot water; and this is perhaps the preferable mode for very thin beds, especially if the tick is soft and pliable. Of course they remain damp a long time, but there is no danger of mildew if they are frequently stirred and shaken.

Washing Feather Ticks.—The second method is to empty the tick of its contents, washing only the former. This is a much more laborious task, even, than the other, as will be vouched for, by any one who has had experience of the "discursive" nature of feathers when freed from confinement. This mode need seldom, if ever, be resorted to, if care and cleanliness are habitually exercised.

Washing Spots.—An ordinary method is to take the bed out upon clean grass, and in a large tub of hot suds, draw up and wash such portions of the tick as need it—or the whole—without much wetting of the feathers. This done, lay the bed flat upon the grass, and through the watering pot sprinkle it with, say, from two to four pails of water, turning it, that both sides may share alike. There is no danger of their becoming musty or mildewed before drying. It is surprising how light and sweet a bed or pillows will become after the process. A thorough drenching in a spring shower is equally efficacious. They will dry rapidly with a little sunshine, or even without it, if frequently turned and shaken, or if spread in successive dry places as they drain. Some regard a heavy spring shower as the very best feather renovator known.

Casing.—For preserving bed-ticks that are in common use from dust and soil, it is an excellent practice to enclose them in a case of "sleazy" unbleached muslin. Have the case a little larger than the bed and sew it up on both sides and at the top. Let it be open at the bottom, but held together by three or four buttons. This can be easily removed and washed. Many have adopted the plan of "casing" their mattresses also in this way. Mosquito netting, if not too thin, may serve a very good purpose, in place of factory muslin.

Summering.—For keeping through the summer it is the best way to hang them over a line or tie them loosely in a sheet or old blanket, to be hung up in an airy closet or unused chamber. To pack them in a chest, or to flatten them under a summer mattress is a great detriment to feather beds.

Chaff or Paper Pillows.—Dry oat chaff or white printing paper, cut fine, makes excellent pillows for infants and sick people. They are soft, cool, and healthy, which cannot always be said of feather pillows.

Hop Pillows.—Dry new hops are said to make excellent pillows, and are of great service in cases of insomnia (sleeplessness) in assisting to get a good night's sleep.

Cheap Bed Spreads—Very pretty bed spreads and pillow shams may be made out of coarse white cotton netting. Make the spread and shams the exact size required, and work some simple design in white embroidery cotton. A large monogram is usually worked in the centre of the spread and also the shams. Blue or pink silesia or cambric is placed on the bed and pillow before putting on the covers, and bows of satin ribbon of the same colour ornament the shams.

To Make A Bed Comfort.—A lady authority says: "I want to tell you about a bed comfort we sleep under—the prettiest, warmest thing I ever saw in my life. It was made of white cotton flannel and knotted with blue Berlin wool of a delicate shade. The contrast between the soft, white plush flannel and the fleecy tassels of the wool was exquisite. The under side of the comfort was first put in the frames, fleecy part down, five or six pounds of batting evenly laid on it, a thin covering spread over that, and the whole quilted or knotted with white thread to keep the cotton in place; then the upper covering had the blue tassels tied in. This has been in use for several years, but is not in the least soiled; and with a single blanket is ample covering even when there are three feet of snow on the ground, and the mercury is twenty degrees below zero In summer it is folded in a sheet and laid carefully away.

To Cover a Quilt.—When the outsides of a comfortable or bed quilt have become tattered, if it is not so heavy that an extra covering will make it burdensome, it is a good plan to renew it in this fashion: First, wash it as clean as possible. If it dries somewhat streaky, no matter; that it shall be thoroughly sweetened is the main object, and no amount of exposure to the air or beating with a stick will accomplish this in the case of an old, long used comfortable. Trim off the tatters of the old covering, have the new in readiness—dark is the best thing—and tack it, holding the quilt in your lap or on a table in front of you, commencing at the nearest edge folding the cloth back toward you. Then baste or tack with strong thread the wrong side of the covering to the quilt, making the stitches short on the right side, and as long upon the wrong side as you think consistent with a firm holding together. When you have gone the length of the quilt, fold over another portion, say six or eight inches wide, and tack again, When one side is finished, do the other in the same way. When this covering becomes soiled, it can be ripped from the quilt in five minutes and ready for the wash, while if elaborately knotted or quilted the task becomes quite formidable.

To Prevent Feathers Working Through Ticks.—Empty the feathers from your tick, turn it wrong side out, and lay it on your table. Then with a piece of beeswax slightly warmed rub the tick thoroughly, giving the entire surface a slight coat of the wax. The best way, however, is to secure ticking so firm that you will not be bothered by the protrusion of feathers.

Pillow Slips.—A very pretty pillow slip is produced by having the case just the size of the pillow in breadth and length; then cut the edges at the open end into deep points, each side alike and points directly opposite, and finish with embroidery. On one set of points sew linen or small pearl buttons and work button holes on the opposite points, so that the two may be fastened together. To complete the work cover the pillow with a tight fitting case made of silk, with a full puff at the end to show between the points of embroidery, after putting on the slip. In place of the silk case, an end piece for economy may be put on, made of silk, with a puff, and fastened to the pillow tick.

To Wash a Blanket.—Let it soak overnight in a tub of water, first dissolving two large tablespoonfuls of borax and about a pint of soap in the water. The night's soaking removes nearly all of the dirt, so that no very hard rubbing is required in the morning. After it has drained from the suds, rinse it thoroughly in two waters and hang it up to dry. Never wring blankets, as it shrinks and draws them more than anything else. The rubbing water should be just hot enough to make it comfortable to the hands. It is not only for woollen goods that borax is useful. It is much to be preferred to soda for whitening cottons, linens and laces. One tablespoonful of it in powder thrown into four or five gallons of boiling water will save half the ordinary allowance of soap. For washing woollen bed blankets, use soap in which there is no resin. Resin hardens the fibres of wool, and should never be used in washing any soft kind of flannel goods. Blankets should be as soft and nappy when they come in from the clothes line as when they come from the store.

METHODS OF BLEACHING.

To Bleach Beeswax.—(*1.*) Melt the wax and add for each pound two ounces of nitrate of soda, and one ounce of sulphuric acid diluted with nine parts of water. The latter should be added very slowly, while the melted wax is constantly stirred with a glass rod. It is then cooled and set aside after filling the vessel with boiling water. Washing the wax with boiling water until no trace of the acid remains completes the process. (*2.*) Slice the wax into thin sheets, and pass a string through them, and hang them in a window exposed to the light and sun. When sufficiently whitened, they can be melted and made into any form desired.

To Bleach Brown Cloth.—Boil the cloth in weak lye, then let it hang on a line or lie upon the grass for a few days. If the sun is hot, sprinkle the cloth twice a day, so as to keep it damp.

To Bleach Cotton Cloth.—(*1*) Tie a quart of ashes in a cloth; boil in water to make a white lye; put your lye into a tub of hot suds, tie up tightly in a stout piece of cloth, one farthing's worth of chloride of lime to each yard of cloth you wish to bleach, take two small pieces of boards and rub the lime through the rag. When it is dissolved, use plenty of water and put in your cloth, stirring it often for half an hour, then rinse it thoroughly. Don't be afraid of rinsing too much; if you put your lime into the tub without rubbing it through a cloth to dissolve it, you will surely find holes in your cloth, as there will be small lumps that will not dissolve. (*2.*) To about six teen yards of cloth, use half a pound of chloride of lime. Have the water hot, and make it quite strong of suds before putting in the lime, Be sure the lime is thoroughly dissolved before putting in the goods, for if there are particles of it remaining undissolved they will eat holes through the cloth. Have water enough in the tub to thoroughly cover the cloth, and while it is in, stir it constantly and often lift it to the surface to let it have air. This must be strictly attended to. The cloth should not remain in the water more than three-quarters of an hour, and often half an hour will be long enough—the judgment as to time must be used somewhat. Then take out, rinse thoroughly in warm water and dry. This process is often a convenient one to have performed ; but for obtaining the real service of the cloth, there is no better way than that of making up the garments from unbleached goods and bleaching them by the natural mode of wearing and washing. (3.)To a pint of water add one ounce of oxalic acid, and use a tumblerful of this to three gallons of water. Stir well while the cloth is in the water, and rinse twice. Some use borax for bleaching by putting a small teacupful of borax into twelve gallons of soft water, and boiling the cloth in the same. Great care must be taken after using any bleaching solution that the material be thoroughly rinsed in clean water to wash away the last traces of the bleaching powder.

To Bleach Fabrics, Etc.—Put a kettle with some lighted charcoal into a close room, or large box ; then strew one or two ounces of powdered brimstone on the hot coals. Hang the articles in the room or box, make the door fast, and let them hang some hours. Fine coloured woollens are thus sulphured before dyed, and straw bonnets are thus bleached.

To Bleach a Faded Dress.—Wash it well in hot suds and boil it until the colour seems to be gone, then wash and rinse and dry in the sun. If not sufficiently white, repeat the boiling, adding a handful of chloride of lime and a gill of vinegar to the water, instead of soap. Good prints and other articles of dress are frequently cast aside because they are faded; but they may again render good service by this mode of bleaching.

To Bleach Forest Ferns.—Gather them after the frost has turned them brown or yellow. Then put them in a solution of chloride of soda (not lime), one-third soda and two water, and let them stand in the sun until white, then rinse them in clear water; flatten then on a piece of glass, carefully wipe them with a soft cloth and press them between blotting paper The pressure should be made by placing the blotting paper between the leaves of a book, not with an iron. When dry they are ready for use.

Bleaching Fluid for Washing.—(*1.*) Into a bucket of boiling water put a pound of lime, and let it stand over night. Next day put over the fire two pounds of sal soda in two gallons of warter. Let it simmer until all is thoroughly dissolved; then pour the lime water into the soda water, mix thoroughly, cool and put away in glass, as it will eat holes in stone jars. A half teacupful of this fluid to three pails of water, when clothes are boiled, will make them beautifully clear and white. If any crumbs of lime fall on the clothes they will leave yellow spots. (*2.*) One of the best bleaching and emollient agents that can be employed in washing clothing, is common refined borax pulverized. It should be dissolved in hot water, at the rate of half a pound to ten gallons. A great saving in soap is effected by its use.

To Bleach a Straw Hat.—Scrape stick sulphur with a knife, mix the powder to a mush with water, plaster it thickly over the straw, and place in the sun for several hours; brush off when dry. An easy and effectual plan. Another way is to burn brimstone in a box containing the hat.

BOXES

ORNAMENTAL AND USEFUL.

Bedroom Box.—Procure a shoe box from a store, and after hinging the top board, cover with chinz calico, with a cushion on top, to contain materials to be made up. It will be found pretty and handy. Such boxes are convenient to have in bedrooms, answering the double purpose of receptacles for various articles, and seats for children.

Bulb Box.—An amateur can, without difficulty, make a box for bulbs that will be both inexpensive and ornamental. In the first place, procure or make a box of half inch stuff, twenty inches long, ten inches wide and seven inches deep. This size may be varied to suit the convenience, but the proportions are about right for symmetrical appearance. The box should be strong, that is, well nailed with one inch brads, and may be ornamented as follows:—Secure some straight twigs and limbs with bark on, about as large as the little finger. The rods may be of willow if other material cannot be obtained. Split the rods in half by use of knife or fine saw, and tack them upon the box. First go around the edges, top and bottom, then up and down the corners, and then divide off into panels by tacking strips up and down. Five panels may be made of four inches each. Fill each panel with strips close together, lessening in size until a two inch space only is left of the board surface. Next take some thin wood and cut out panels to fit the spaces, making them as smooth as possible with plane and sand paper; fasten them in with brads;

then after you are done nailing, have the box lined with zinc; when this is done, give the little panels four coats of white paint, and when the paint is dry take some pressed ferns and gay leaves, group them nicely and glue to the centre of the panels; give all a coat of white varnish, and you will have a nice box.

Collar Box.—Take either a round or square box of suitable size, line the inside with silk or satin, then cover the outside with plush or velvet, glued to the edges. Before putting the plush on the lid, embroider a small spray of flowers in Kensington, or make the flowers of ribbon and do the foliage in arasene. Plush or velvet makes a rich covering without the embroidery, and merely an artistic bow of satin ribbon on one corner. Handkerchief and glove boxes may be covered in same manner.

Handkerchief Boxes.-A very pretty box for keeping handkerchiefs in may be made of a cigar box, or a letter paper box that opens in the centre. To make one of the cigar box, line the inside with pale blue or pink silk, by pasting on with flour paste. Cover the outside with pale blue quilted satin, with the monogram on the cover in blue and pink embroidery silk. To make from a letter box, use a tufted cushion on top of satin and put an insertion of white lace around it with the same colour underneath. The sides may be covered with satin glued or pasted on, and the corners or edges finished by handsome cords; silver or gilt looks best. Another and elegant design is to take an ordinary box, cover it with black satin, on the lid paint a design in water colours, or transfer a picture, having the principal flowers of blue and crimson. Around the sides put antique lace and finish the edges of the box with a silk cord corresponding with the colours of flowers. The inside of the box is lined with quilted satin and a quilling of ribbon used to cover the unfinished edges. For the feet and knobs, use large gilt beads, strung on coarse linen thread and a tiny bead to hold the thread in place.

Newspaper Box.—A cheap box for newspapers may be made of an old pasteboard silk hat box. One that tapers from top downward and oval shaped is best. Cut down the sides of the box, leaving a little more than half the breadth at top and a little less than one-half at the bottom; that is, cut away a portion of the box so that it will set flat against the wall. Fit in a back made of the cover, leaving what extension there may be above to fasten by. Round the extension off nicely, or make in any shape that pleases your fancy, and sew the same in, putting in corners all the way round of cloth well pasted, and putting in wire at top firmly sewed in place, makes the box stiff and more durable. It is now ready to ornament. Taste may be exercised in covering with coloured paper, or small figured wall paper and pictures pasted in front, heads surrounded with wreaths, bouquets, etc.; the edges should be bound with a contrasting colour, gilt, velvet bordering, or scallops and points; hang with three strings if not wired, one in front and two on sides of front, close to back; hang with long cords, near the ceiling, like a picture, but a little lower for convenience. If a wire runs up from around the top along the edge of the back stitched on, or covered by cloth well pasted, the basket may be suspended by a nail and the use of cords not required.

Old Cigar Boxes.—Empty cigar boxes may be put to many uses. They are handy for storing scouring material in the pantry; for keeping nails, tacks, rivets, buttons, etc; for storing the pipe-smoker's material; for storing garden seeds, making marten boxes, mouse traps, and when taken apart, the sides being of cedar, make good material for the bracket saw, and for panels upon which to paint small pictures.

Parlour Wood Box.—Secure a box of appropriate size, one that is stout, and ornament in one of the three following ways, as time and means will permit: cover with satin wall paper of pretty pattern, with sticks, as directed for portable flower box, or with a dark patterned fine floor matting. To finish the edge when matting is used, tack on either a black walnut or gilt moulding, then trim with lambrequins made of light brown cloth or felt, worked in crewel or silk in the Kensington stitch, in any design one may choose. When the embroidery is finished, press lightly on the wrong side. This box may also be used for other purposes.

Portable Flower Box.—Have a box made a foot and a half wide, fifteen inches deep, and as long as the window of your house is wide. The box should be made of pine, flaring, so as to be four or five inches wider at the top than at the bottom. Have it mounted upon legs long enough to bring top of box even with window sill. It may be painted, stained or covered with sticks on outside, so as to have a rustic appearance. In this case, the sticks will look better to be split in half and scraped white and varnished. If the sticks are used, first border the edges and then form into panels. The inside of the box should be thoroughly painted to prevent the wood absorbing moisture. Over the bottom is spread a three inch layer of bits of broken flower pots or small stones, and on this is set a double row of pots, or as many as will stand evenly on the surface. Then a thick layer of sand is poured over the broken pieces, and the rest of the space filled up with earth till it is even with the tops of the flower pots. In the bed thus formed bulbs and slips are planted between the pots, and vines are started at the corners. When the latter are well under way, wires, on which the vines twist, are fastened diagonally from corner to corner, forming a beautiful green arch over what seems to be a bed taken bodily from the garden. Sometimes a tiny hanging basket, or an ivy growing in water, is hung from where the wires cross in the arch.

Propogating Box.—All that is necessary is a small wooden box a little higher at one side than the other, with sides sloping to match, covered with glass. and have two inches of sand in the bottom. The sand must be kept constantly wet, the glass always on, and the box put in the shade where sunlight will not fall upon it. The tight glass keeps the inside of the box moist, so that the cuttings never wilt. Plants, however, so treated, require to be shaded until started in pots; for if taken from the close box and put at once into the hot sun, they would wilt.

Strawberry Boxes.—Home made boxes may be provided for marketing berries at little expense. For the sides of the boxes have the material sawed three and one-eighth inches wide and one-fouth of an inch thick; for the ends three inches wide and one-fourth of an inch thick, and for the bottom four and three-fourths inches wide and one-eighth of an inch thick, and cut into lengths of five inches. The end pieces being but three inches wide and the sides three and one-eight admits the bottoms to be nailed on or below the end pieces, but level with the sides, which project one-eighth of an inch below the end pieces, but bringing all on a level when the box is nailed together, and the boxes are five and one-half by five inches on the outside, and four and one-fourth inside or in the clear, measuring sixty-seven and a half cubic inches, and holding an honest day measure quart which consists of 67·6 cubic inches. The wood of the white walnut or butternut is well adapted to making both crates and boxes, though hardly equal to basswood or willow.

Toilet Box.—Procure a box eight or ten inches square with cover hinged, no odds how plain; a boy can make one. The only essential point is to have it symmetrical and firm. Quilted or puffed satin makes a pretty lining. Pink and blue are more suitable colours. Cover the sides and top with puffed satin, or rather satin puffs. A frill of lace may hang over the puffs on the sides and a block of lace cover the top.

Window Flower Boxes.—For window flowers, the box may be of tin painted green, or of common white pine, stained and oiled, with a strip of moulding, or a few linches and fir comes tacked on by way of ornament. Or prettier still, it may be turned into a rustic affair by covering it with narrow horizontal lengths of rough barked wood. Birch boughs or laurel, or both alternating, will answer, halved lengthwise with the saw, and cut into sections to fit the box, the shelf which supports it being edged with the same. Or a gaily coloured affair may be made with narrow strips of oil-cloth, finished off with a wooden moulding at top and bottom, a set pattern being chosen of bright solid colours, like the tiles which are so much in vogue for more expensive arrangements.

Box for Newspaper Cuttings.—We have long used and found very handy a good strong box, made of wood or stout cardboard, with a lid. The cuttings and pictures are gummed on one side only of a piece of clean paper, quarto size. Each box is kept for special clippings. Thus, suppose one is interested in the history and the archæology of his own county, all cuttings relating to these subjects can be arranged in alphabetical order in these boxes. The writer has a fairly complete history of Kent so arranged in about a score of boxes; similarly, the Castles of England, the Castles of the Rhine. The boxes can be made to appear like books and placed upon shelves. The system has been found to be more convenient than using scrap-books.

BOOTS AND SHOES.

Blacking Ball for Shoes.—Take mutton suet four ounces, beeswax one ounce, sweet oil one ounce, sugar candy and gum arabic one dram each, in fine powder; melt these well together over a gentle fire, and add thereto about a spoonful of turpentine, and lampblack sufficient to give it a good black colour. While hot enough to run, make it into a ball by pouring the liquor into a tin mould, or let it stand till almost cold; or it may be moulded by the hand in any desired shape.

Castor Oil for Leather.—I have found nothing so good for shoe leather as castor oil. It softens, renders the substance impervious to water, and does not interfere with putting on a polish with common blacking afterward. The boot or shoe should be thoroughly cleaned with a knife and wet cloth, but not soaked in water, and then the oil applied before the leather is quite dry. Spread three coats of oil over the surface, one after the other, as fast as they penetrate. Leather will never get hard if always oiled when damp.

Cheap Ivory-Black for Shoes.—Ivory-black, two ounces, brown sugar, one and one-half ounces, and sweet oil, one-half tablespoonful. Mix them well, and then gradually add one-half pint of small beer. Another formula is a quarter pound of ivory-black, a quarter pound of moist sugar, a tablespoonful of flour, a piece of tallow about the size of a walnut, and a small piece of gum arabic. Make a paste of the flour, and while hot put in the tallow, then the sugar, and afterward mix the whole well together in a quart of water.

Hardening Shoe Leather.—One of the most important things to be observed in the management of boots and shoes is to keep the leather soft and pliable. Leather that has become hard and stiff is liable to crack and chafe, and soon becomes worthless.

Heating Shoes.—The extreme heat in which most men and women expose boots and shoes during winter deprives leather of its vitality, rendering it liable to break and crack. When leather becomes so warm as to give off the smell of leather it is singed. Close rubber shoes also destroy the life of leather. All varnishes and all blacking containing the properties of common varnish should be avoided.

Liquid Shoe Blacking.—As a general rule, blacking that contains acid should not be used upon leather, but the following is claimed to be an exception on account of its use in connection with sugar and oil. Take three ounces of ivory-black, two ounces of coarse sugar, one ounce of sulphuric acid, one ounce of muriatic acid, one tablespoonful of sweet oil and lemon acid and one pint of vinegar. First mix the ivory-black and sweet oil together, then the lemon and sugar, with a little vinegar to qualify the blacking; then add the sulphuric and muriatic acids, and mix them well together.

Squeaking Boots.—The squeaking of boots and shoes sometimes become very annoying, and especially when about the sick room or walking down a church aisle. To prevent this, drive a row of pegs through the centre of the sole from the toe towards the heel. The noise is caused by the friction of the layer in the centre. This method stiffens the sole somewhat but is preferable to the annoyance. Saturating the sole with kerosine oil is said to be effectual also. If the layer in the centre is felt instead of leather there would be no noise. Most shoemakers fill up the centre with odd pieces of leather, and felt would be quite as good as this for all purposes.

Shoe Blacking without Acid.—This recipe is said to produce a superior article of shoe blacking. From three to four pounds of lampblack and one half pound of bone black are well mixed with five pounds of glycerine and treacle. Meanwhile two and one half ounces of gutta percha are cautiously fused in a copper or iron saucepan, and ten ounces of olive oil added, with continual stirring, and afterward one ounce of stearine. The warm mass is added to the former mixture, and then a solution of five ounces of gum Senegal in one and one half pounds of water and one dram each of the oil of rosemary and lavender may be added. For use the blacking is diluted with three to four parts of water. This blacking keeps the leather soft, and renders it more durable.

Treading Shoes to One Side.—The habit of running down the heels of boots and shoes is the result of allowing infants to stand upon their feet or to walk while too young and tender. One remedy is the practice of turning the foot in an opposite direction from which is the tendency. As an aid to this, the heel may be built higher on one side than the other, and a stiff counter used. Nails driven into the heel of the shoe on the side which is worn over will be of advantage also; or better than this, a rim of steel passing around the bottom of the heel and kept in place by nails or a few short screws.

To Soften Kid Boots.—Melt a quarter of a pound of tallow and add to it the same weight of olive oil, stir, and let it stand still; apply a small quantity occasionally with a piece of flannel. Should the boots be very dirty, cleanse with warm water.

To Mend Rubber Shoes.—Get a piece of pure rubber—an old shoe—vulcanized will not do; cut into small bits; put it in a bottle and cover to twice its depth with spirits of turpentine or refined coal tar naphtha—not petroleum naphtha. Stop the bottle and set to one side, shaking it frequently. The rubber will soon dissolve. Then take the shoe and press the rip or cut close together and put on the solution with a camel's hair brush. Continue to apply as fast as it dries until a thorough coating is formed. Another way is to procure a small tin box of prepared rubber in a semi-liquid condition, which can be purchased for a few pence at almost any store where India rubber goods are kept for sale. The boot must be washed clean and dried. Then the surface around the rent is to be roughened a little with the point of a knife, after which the semi-liquid rubber is spread on with a spoon as thickly as it can be without flowing away. Then a neat patch is prepared and covered with one or two coats of the rubber; when the prepared rubber is almost dry, the patch is applied and held on firmly for a few minutes.

Varnish for Ladies' Shoes.—Place three pounds of rain water in a pot over the fire, and, when boiling, add four ounces of white pulverized wax, one ounce of clear, transparent glue in small pieces, two ounces of pulverized gum Senegal, two ounces of white soap scraped fine, two ounces of brown pulverized sugar. The ingredients are placed in one by one, and every time stirred up; it is well to take the pot from the fire every time a substance is added, to prevent boiling over. When all is added, the pot is removed from the fire, and when sufficiently cooled, three ounces of alcohol are added, and finally three ounces of fine Frankfort black, well incorporated by continued stirring. This varnish is put on the leather with a brush, and is very valuable for boots and shoes, as it can be afterward polished with a large brush like ordinary blacking, shows a high polish, and does not soil the clothing.

Water-proof Soles.—For farmers' boots, when exposed to snow and slush, hot tar, if applied to the soles, will make them water-proof. Let it be as hot as the leather will bear without injury, applied with a swab, and dry by the fire. The operation may be repeated two or three times during the winter, if necessary. It makes the surface of the leather quite hard, so that it wears longer, as well as keeps the water out. One should make the test on a pair of boots not very valuable, first.

To make Leather Water-Proof.—Leather can be made water-proof by coating it, until it will absorb no more, with linseed oil and Venice turpentine; boil half a pound of the latter in one quart of the oil, and apply while warm.

Another Method.—Dissolve three quarters of an ounce of paraffin in a pint of lard oil. The best quality of oil should be used. It will be necessary to heat the oil slightly in order to dissolve the paraffin. This preparation will harden leather somewhat, but it is valuable where boots or other leather articles are to be for some time in water. The hardness may be lessened by reducing the amount of paraffin, but it is less impervious to water.

Third Method.—Melt together beef tallow four ounces, resin one ounce, and beeswax one ounce, and when nearly cooled solid, add as much neat's foot oil as the above mixture measures. It is to be applied with a soft rag. The leather should be warmed before a fire and the application well rubbed in. It requires two applications to make the leather thoroughly water-proof.

To Clean Leather.—Castile soap in warm water, or a little soda in water, will remove grease. For carriage leather, milk and water is good. To remove ink stains from leather, use oxalic acid diluted. This acid is poison and should be used with care. In dilution, it may be used one ounce of crystals to a pint of water.

To Harden Leather.—Leather may be stiffened by extracting the oily matters with bisulphide of carbon, and afterward immersing it for a short time in a hot concentrated solution of zinc chloride, pressing and drying at about 220° Fahr.

CARPETS.

MAKING AND CLEANING.

How to Mop a Carpet.—Take a clean mop, made of woollen cloth is the best, make a little clean warm soap-suds with hard soap, dip in the mop and ring half dry, then rub the carpet hard. It will take up the dirt and make an old carpet look much better, and will not soil the best, After mopping, rinse with clear warm water, using but little, and then wipe with clean dry mop. The best carpet may be mopped in this way, and if dirty greatly improved in appearance—in truth, made to look as well as new. If there is much green in the carpet, put alum in the rinsing water; it will prevent fading, and make the colour look brighter.

How to Sweep a Carpet.—Almost invariably carpets are swept by too much pressure upon the broom. Sometimes the operator, with the handle inclined backward toward her, presses down as a forward thrust is given, and thus throws the heavier dirt half way across the room, while the light particles are sent whirling about, covering, as it settles, every article of furniture. Another wrong way to sweep a carpet is to move the broom forward with a heavy, drawing stroke, by which the material to be removed is pressed into the carpet rather than worked gently along on the surface. The right way to sweep is to incline the handle a little forward, then give a light drawing stroke, allowing the broom to scarcely touch the carpet. Not one half the weight of the broom should be allowed to press on the carpet, as the dirt is moved forward. Let the dirt be moved and rolled along lightly. If a generous quantity of tea grounds or small bits of wet paper can be spread over the carpet before the sweeping is commenced, all the fine dirt will adhere to the wet materials. The broom should be a good one having a long elastic brush then by touching the carpet lightly it will scarce require the strength of a child to sweep a large parlour in few minutes, and the work will be done in a most satisfactory manner.

Moths in Carpets.—Camphor will not stop the ravages of moths in carpets after they have commenced eating. Then they pay no regard to the presence of camphor, cedar or tobacco. A good way to kill them is to take a coarse crash towel and wring it out of clean water. Spread it smoothly on the carpet, then iron it dry with a good hot iron, repeating the operation on all suspected places and those least used. It does not injure the pile or colour of the carpet in the least; it is not necessary to press hard, heat and steam being the agents, and they do the work effectually on worm and eggs. The camphor will doubtless prevent future depredations of the miller.

Stair Carpets.—*Care of.*—Where stair paddings are not used, nail some old carpeting on several thicknesses of canvas over the edges of the stairs before putting down the carpet. If the material mentioned is not at hand, use folded pieces of newspaper. It is a good plan to buy more carpet than is needed to cover the stairs, and move it several times each season if much used, so that the whole will wear evenly: if stair carpets cannot be changed in this way they will not last long, Stair carpets should never be swept with a common floor broom; it is ruinous to their good looks and soon wears them out. A small dusting broom should be used, taking care not to brush across the warp. After a thorough dusting a damp cloth may often be used to good advantage,

Taking up Carpets.—Carpets ought to be taken up in summer and kept up until fall. Why should we not more generally imitate continental custom by painting or polishing our floors ? Floors, painted or polished, look far prettier in July sunshine than any carpets, which are then mere fusty traps to catch dust, harbour insects, and retain bad smells. Everything has its use and its seasons. Where it is impossible to paint or polish the floors of a house, the employment of matting will be good economy in summer, and far cleaner. Matting, too, of charming patterns, may now be bought very cheaply, and it keeps a room delightfully cool and fresh.

To Take Grease out of Carpets.—Cover the grease spot with whiting, and let it remain until it becomes saturated with the grease ; then scrape it off and cover with another coat of whiting, and if this does not remove the grease repeat the application. Three coats of whiting will in most cases remove the grease, when it should be brushed off with a clothes brush. If the whiting is not at hand put on plenty of flour and do it as soon as possible. Put flour on the floor under the oil spot. Next day brush up all the flour from the carpet and floor with a stiff brush, and put on fresh flour. It will seldom need it a third time. Another method is to take the yolk of an egg entirely free from the white; mix it with a little warm water (be sure not to scald the egg), and with a soft brush apply the mixture, and rub it on the spot until the grease appears removed or loose. Wash off the egg with moderately warm water, and finally rinse off the whole with clean cold water. Should not all the grease be removed, which may arise from not being sufficiently washed, dry and repeat the operation. Still another method is to rub them with white flannel dipped in spirits of turpentine. If they show again, repeat the process. Ammonia water is also good, but the dry process is preferable, as washing out is liable to injure adjacent parts.

To Remove Tar from Carpets.—A very good material for removing tar is butter. Tar is soluble in fat, and especially in butter ; when this is left on the tar spot for some time, both butter and tar are easily washed out by a sponge, with soap and water, It is the same with resinous waggon grease.

To Renew Colours in a Carpet.—A teaspoonful of ammonia in one gallon of warm water will often restore the colour of carpets, even if damaged by acid or alkali. If a ceiling has been whitewashed with the carpet down and a few drops are visible, this will remove them. Or, after the carpet is well beaten and brushed, scour with ox gall, which will not only extract grease, but freshen the colours. Put half of a fresh gall in a pail of warm suds and apply with a clean scrubbing brush ; follow with the other half of gall in a pail of pure warm water; apply with a flannel cloth—old underwear is good —and wipe with dry flannel. This will make old Brussels carpet look like new, Do not saturate the carpet.

The Rag Carpet.—As much good taste can be displayed in making a rag carpet as in any other article of domestic manufacture, and no one need be ashamed of a good one ; yet I believe there is no home-made article where such a lack of artistic skill is shown as in this. The rags may be cut well, and nicely coloured, but the arrangement is too often left to the weaver, who will plan the stripe to suit her own taste, or so as to be most convenient for weaving. It is better to plan your own stripe, or get some one to help you whom you know has better taste than yourself. Wind the stripe you wish copied upon a strip of board, and make your rags of different colour to correspond in pounds with the different shades put into the stripe. Cotton rags should be cut wider than woollen, so that they will show the same size when beaten up, and make the texture uniform ; this can be easily managed by pressing a strip of each kind between the fingers. Never wind two colours in one ball, for it will perplex the weaver, and ten chances to one be the means of injuring the beauty of your carpet. The most convenient way for cutting rags, if one has a sewing machine is to take breadths of the same kind and colour, lap the ends half an inch or more and sew twice across; then tear strips the whole length, cutting across the seams of course, and there will be but little work left for the needle. If a smooth carpet is wanted, most of the rags must be cotton, and the other rags made of fine woollen cloth. Coarse threaded woollen rags make a carpet look rough, and though it may do well for a kitchen, it is not nice for a dining room. Unless the rags are light, it will take a pound and a half, and sometimes more, for each yard of carpet. To know when sufficient rags are prepared for the number of yards wanted, the prepared rags must be weighed. If the rags are light, it will not take quite a pound and a half; but if they are coarse threaded or woollen rags, it will take some more than a pound and a half, if the carpet is well beaten up. For a hap-hazard carpet, all different colours may be mixed in sewing. This will use up all short rags, or any colour or shade, and often makes a very pretty carpet, which may be woven easier and cheaper than a striped carpet. Short pieces, or those not more than three or four yards long, alternated with shorter ones, look the best in this kind of carpet. Any light mixed or plaided woollens may be improved in colour by dipping in a good red dye. Clean white rags can be coloured yellow, orange, blue or green. Dingy white rags will look well coloured hemlock colour and set with lime. As to warp, all kinds are used, some preferring to buy cotton yarn and double it; others get the prepared which is by far the cheapest, if a woman values her time anything The warp is usually considered best when given either a permanent dark or nankeen colour and it certainly looks better than white after the carpet has been used a while. It may be reeled in skeins of five knots before colouring, allowing one skein to a yard and about three knots over, to be woven in at the end of each breadth, for binding. Measure the inside of the room and let the weaver know how long to make each breadth, Carpets will shrink a little in length from the weaver's measure after they come out of the loom, but will often stretch a little in width.

Carpets and Floor Cloth.—The floor cloth used so extensively in England is sometimes called oil cloth, but it is such only in so far that oil is used in the paint with which the cloth is covered. It is in reality painted cloth, or better still, flax cloth painted in oil colours. Carpets are a kind of woven fabric. The kinds best known are Axminster, Venetian, Kidderminster, Scotch, Brussels and Wilton. Axminster carpets are generally woven in one piece. The warp or long threads are of strong linen. A tuft or bunch of different coloured worsted is fastened in among the warp threads, and when a row of such tufts is completed a weft thread of linen is thrown in by the shuttle. Another row of tufts is then worked in, the colours being selected according to the pattern required. Persian and Turkey carpets are somewhat similarly made, the linen threads of the warp and weft being in all then wholly hidden by the tufts. In Venetian carpeting, frequently used for stairs, the warp threads are arranged in stripes of different colours and the weft is woven in with or amongst them in such a manner that the warp threads alone are visible at the surface. Scotch carpet is made in strips of about a yard wide, these being afterwards sewn together as required. This carpeting has no linen threads, the warp is of worsted, the weft of wool, the difference between the two being that the wool has shorter and finer fibres than the worsted. The construction is such as to form a double cloth, having two sets of warp and two of weft, each warp being intersected by both wefts. Brussels carpeting is perhaps the most important at the present day. It is more complex than the Scotch, and is composed of linen and worsted, the former to constitute the ground or back, the latter to form the surface. It is so woven that its surface is nothing but a series of loops, and these being cut somewhat like velvet give the Wilton carpet.

CHEAP WINDOW CURTAINS

Canton Flannel Curtains.—Very pretty curtains may be made of Canton flannel, ornamented with cretonne figures, which being carefully chosen and cut out, should be artistically grouped, and glued on the flannel, and then pressed with a warm flat-iron. The effect is novel. In preparing these window hangings one result will suggest another.

Colours for Curtains.—A *touch* of yellow with either blue or green has an excellent effect. Crimson always furnishes a large window better than a small one, and pale blue or pink requires a very dainty taste and surroundings which are in every way artistic. It is impossible to be reckless with these neutral tones or they vulgarize the rest of the apartment. We can give colour and effect in any room with other tints, regardless of minor surroudings, but a bed room hung in any delicate shade demands a certain perfection, from the tint of the wall to the plates or vases on the chiffoniers, or frames upon the obscurest pictures in the room.

Damask Curtains.—Curtains more elaborate than muslin may be made of grey table damask. Divide the width for each window, put a hem border of either the Canton flannel, Turkey red, or the red and white table damask, which trims very prettily; then embroider a wide band across the lower part of the curtain, one at the upper, and edge these with stripes of velvet or velveteen. These curtains may be manufactured at home. The embroidery is, of course, in worsted, exactly like that used in the tidies. Manila cloth or burlaps is very pretty, the latter worked in worsted. For all who have time to devote to such graceful employments, beautiful curtain borders, and very inexpensive ones, may be made of worsted flowers, such as pansies, marguerites and other flat-petalled blossoms. These would border the unbleached muslin most effectively, with or without a finish of black velvet.

Fringe and Chintz Curtain Trimmings.—A good effect is obtained by putting blue or crimson worsted fringe across the upper bands. Fringe in this way is very much used in the best upholsteries. Still other modes of trimming the muslin curtains are with chintzes and cretonnes. The pretty glace chintz which you can find for about ninepence a yard, in band patterns, straight garlands of roses, and the like, is extremely effective put on in strips, the width of the chintz making three or four bands, so that seven yards of the chintz and eight of the muslin will furnish one window. The cretonnes also trim effectively in a border cut out and worked in button-hole stitch, if you like, or simply put on as border, with a frill of the cretonne muslin fluted by a machine.

Muslin Curtains.—No one who has not used unbleached muslin, or cloth of open texture, called cheese capping, can realize how rich and becoming such curtains, if properly made, are to a room. Put up either with cornice, pole and rings, or even fastened to the upper casing of the window and doubled over at the top in plaits, forming a sort of lambrequin, they are nice. For trimming at the lower part use three bars of coloured flannel, and at the top beneath the cornice or pole three more, each one edged with a feather-stitch embroidery in worsted silk. The curtains should be long enough to touch the floor when looped The flannel for trimming unbleached muslin curtains to be most effective should be crimson, navy blue, or yellow. They may contain them all, one stripe of each. Cut the flannel lengthwise to avoid seams, making bars of either one-eighth or one-quarter in width, according to fancy. Baste them across the curtain about half a yard above the hem, leaving a small distance between each. A half or quarter of a yard below the cornice put the same, with equal distances between. Finish the edges with a row of feather-stitch or any such embroidery in worsted. Black, yellow, crimson, and deep green, with a little pale salmon, are good colours to use, but of course individual fancy may be exercised In case lining is desired, a cheaper quality of unbleached muslin or a coloured Canton flannel may be used. When the side pieces of the curtain are finished, take a strip two yards long and about one yard in depth, and trim with narrow bands of the flannel to match the sides. This must be plaited on the centre of the cornice *first*, or hung on the pole if one is used; then plait on the side pieces, and do not loop them back unless such an effect be specially suited to the window. Curtains of this description may be made for about ten shillings a window. Curtains quite as pretty, though less brilliant in effect may be made in a simpler way. Use the unbleached muslin, trimming in bands, similar to the flannel ones described, with coloured Canton flannels, which are to be found in rich shades of crimson, blue and brown for a few pence a yard. Either the right or wrong side may be used effectively, a feather-stitch border of black and yellow being the best finish. With these it is better to have a border about a quarter of a yard in depth across the bottom of the curtains of the flannel.

Poles fur Curtains.—Cornices are not so much used as poles, and to obtain the latter get a carpenter to cut you simple poles of black walnut or stained pine. It is easy to find brass tops, which you can insert yourself, and put on the curtains either on rings or by running them over the poles. A very little practise and experience suggest many economies of the sort, which only need some one's trial for a precedent.

Scrap Silk Curtains—A very effective and unique heavy curtain is made in the following manner: Make a collection of all colours and kinds of old silk and satin which is not soiled, and the more new scraps the better. Cut or tear into strips, say half an inch wide; sew these together and wind into a ball exactly as rags are prepared for a carpet. When a sufficient quantity by weight is thus prepared, take it to a carpet weaver and have it woven the width you desire the curtain, in the same manner a rag carpet is made, the weaver using silk instead of cotton warp. If the warp is all of one shade, garnet, gold, or blue as preferred, it will produce the best effect. Individual taste may be exercised in arranging the colours of the silk strips, but they shonld be promiscuously mingled. Avoid set stripes of red or blue of any width at all. If two or three strands simply, of gold colour, a foot apart when woven, can be obtained, the result is pleasing. When the weaver returns your scraps woven into the desired length for curtain or portière, finish the front and bottom edge with a band of plush or velvet of a bright shade, and when hung loop with the gilded chains.

Mr. Pugin on Curtains.—In commenting upon paper hangings Mr. Pugin says: The harmony of the colouring of a room can only be produced by the same kind of knowledge which guides an artist in painting: which is that neither the colours of the carpet should be so brilliant as to destroy the effect of those of the paper, nor the contrary, and that the curtains should always be of a colour suitable to both. It is not necessary that they should be of the same colour, but that they should be of colours which harmonize. A very brilliant colour such as crimson in the carpet may have a drab or other subdued colour in the curtains or paper; but then there should be some of the brilliant colour introduced in both as bordering or ornaments. Thus a room with a bright blue or crimson carpet may have white or yellow or drab curtains or paper; but then a crimson bordering or ornament should be introduced in them to harmonize the effect. It would not do in the case of a blue carpet, to have green curtains or paper, or with crimson to have scarlet, because these colours do not accord. A green carpet may have black, red, or white curtains, with green borders or ornaments. A yellow carpet may have black curtains and a dark grey paper with yellow border and ornaments. It should never be forgotten that the whole effect of an elegantly furnished room may be destroyed by the selection of a carpet which though handsome in itself, does not harmonize in with the other furniture.

CORKS.

How to bore a Cork.—When it is desired to make a smooth hole through a cork, first cut with a penknife as near round as possible, and then rub through a rat-tail file.

To get a Cork from inside a Bottle.—Where a cork has by accident or through necessity, been forced down into a bottle, it may be removed by doubling a string and dropping the bow end into the bottle, and turning the same bottom side up. When the cork gets into the loop it may be drawn out easily.

To make Cork Air-tight.—Cover with a cement made of finely powdered litharge, mixed with undiluted glycerine.

To make prepared Corks.—If immersed in melted paraffine, porous corks will become both gas and water-tight. Allow the corks to remain for about five minutes beneath the surface of melted paraffine in a suitable vessel, the corks being held down either by a perforated lid, wire screen or similar device. Corks thus prepared can be easily cut and bored, have a perfectly smooth exterior, may be introduced and removed from the neck of a flask with ease, and make a perfect seal. The method has long been in use in English laboratories.

To soften Cork.—To soften sheet cork so as to make it pliable and easily shaped, steam it thoroughly, or boil it in water for an hour or so.

DISINFECTANTS.

Bad Odours and Disease.—There is no means more certain to bring disease upon the members of a household, than by allowing infectious matter to remain upon the premises. The offensive odours that arise from close, damp places, decaying vegetables in a cellar, unclean sinks, etc., are almost certain to engender some malignant disease, and those who neglect the proper use of disinfectants are the ones who suffer the penalty attached to the violation of an imperative, sanitary law.

To generally Disinfect.—Take a large iron shovel, heat red hot, then pour upon the hot shovel a little carbolic acid. The carbolic acid is vapourized. The hot shovel can be carried about and rooms and passages filled with the vapours. Or place upon the hot shovel a few pieces of brimstone. The brimstone burns with a blue flame and fumes are given off which form one of the best known disinfectants. We have often filled a room with brimstone fumes without entering the room. If the door of a room is slightly opened there is generally a draught into the room at the bottom of the opening and from the room at the top. Having the hot shovel containing the brimstone at the or near the bottom of the door the draught carries the fumes into the room. If it is desired to isolate a room hang up a sheet outside and another inside the door and keep these damp with carbolic acid and water. These simple methods are very effective. In cases of fever if it is necessary for any person to leave the house they should stand for a few moments in the steam of carbolic, obtained as above described.

To deodorize Onion Kettles.—Kettles may be cleansed of onion and other odours by dissolving a teaspoonful of pearlash in water and washing them with the liquid.

To disinfect a Cellar.—A damp, musty cellar may be sweetened by sprinkling upon the floor pulverized copperas, chloride of lime, or even common lime. The most effective means we have ever used to disinfect decaying vegetable matter is chloride of lime in solution. One pound may be dissolved in two gallons of water. Plaster of Paris has also been found an excellent absorbent of noxious odours. If used one part with three parts of charcoal it will be found still better.

To disinfect a Cistern.—To purify cistern water, take a pound or two—according to the amount of water—of caustic soda or a similar quantity of concentrated lye, and put the same into the cistern ; this will disinfect the stagnant water, and cost nothing compared to the benefits derived. When using the concentrated lye dissolve it in warm water, and then pour it into the cistern, at the same time agitating the water of the reservoir.

To disinfect Sinks and Drains.—Copperas dissolved in water, one-fourth of a pound to a gallon, and poured into a sink and water drain occasionally, will keep such places sweet and wholesome. A little chloride of lime, say half a pound to a gallon of water, will have the same effect, and either of these costs but a trifle. A preparation may be made at home which will answer about as well as the chloride of lime. Dissolve a bushel of salt in a barrel of water, and with the salt water slake a barrel of lime, which should be made wet enough to form a thin paste or wash.

To remove the smell of Petroleum.—The best method of completely removing from glass or other vessels the smell of any petroleum which may have been previously contained in them consists in introducing a suitable quantity of milk of lime and shaking it around thoroughly, and after allowing it to stand for a few minutes, repeating the operation. At the same time the external surface of the vessel is to be washed with a rag dipped in the same substance. Petroleum forms an emulsion with the milk of lime, and can thus be readily removed. If particles of thickened petroleum adhere to the glass, these can be removed by washing with fine sand, or by other mechanical means. After emptying out the emulsion produced, it is only necessary to rinse with water, after which as much chloride of lime as will go on the point of a knife is to be introduced and shaken with water, and then allowed to stand about an hour, the exterior being rinsed off in a similar manner. If the liquids referred to are used hot, this operation will be materially facilitated.

DOMESTIC MISCELLANY.

Broom for Carpet Cleaning.—Set a pail of cold water out by the door, wet the broom in it, knock it to get off all the drops, sweep a yard or so, then wash the broom as before and sweep again, being careful to shake all the drops off the broom, and not sweep far at a time. If done with care it will clean a carpet very nicely, and you will be surprised at the quantity of dirt in the water. The water may need changing once or twice, if the carpet is very dusty.

To hang a Broom.—Take a large ring, such as one uses in the back of a picture frame, costing about a halfpenny, and screw it into the end of the broom handle; then drive a nail or a small hook, where you wish to hang your broom.

Management of Brooms.—If brooms are dipped in boiling suds, once a week, they will become very tough, will not cut the carpet, last much longer and always sweep like a new broom. Do not keep a broom before the fire; the brush is liable to break, being so dry. The dampening lengthens out its days of usefulness. Do not store brooms where there are rats and mice, they like the corn. A broom that is all out of shape may be restored by soaking, then pressing into shape beneath something heavy.

Broken Branches.—Often plants get broken and hang by a thread of bark. Raise the branch gently and place it in perfect contact with the original place; wind around and cross over a slip of adhesive plaster—cut about one quarter of an inch wide. Press it neatly and closely to keep out the air. The heat of the hand will be sufficient to make it stick.

Blackberry Wine.—Measure your berries and bruise them; to every gallon adding one quart of boiling water. Let the mixture stand twenty-four hours, stirring occasionally; then strain off the liquor into a cask, to every gallon adding two pounds of sugar, cork tight, and let it stand to the following October, and you will have wine ready for use, without further straining or boiling.

Black Ants.—To drive away black ants, dissolve two-pennyworth of tartar emetic in a tablespoonful of water and add a teaspoonful of sugar. Set the mixture in an open, shallow dish where ants are troublesome.

How to Carve.—Although it is a daily duty for many men and women to cut up meat for a family, there are multitudes who do it neither wise nor well. The following suggestions from a caterer on this point will be an aid, especially to young housekeepers:—

To Carve Fowls, which should always be laid with the breast uppermost, place the fork in the breast and take off the wings and legs without turning the fowl; then cut the merry-thought; cut slices from the breast; cut out the collar bone; cut off the side pieces, and then cut the carcass in two. Divide the joints in the legs of a turkey.

In Carving Sirloin, cut thin slices from the side next to you (it must be on the dish with the tenderloin underneath), then turn it. Help the guests to both kinds.

In Carving a Leg of Mutton or Ham, begin by cutting across the middle to the bone.

Cut a Tongue across and not lengthwise, and held from the middle part.

Carve a Forequarter of Lamb by separating the shoulder from the ribs and then divide the ribs.

To Carve a Loin of Veal, begin at the smaller end and separate the ribs. Help each one to a piece of kidney and its fat. Carve pork and mutton in the same way.

To Carve a Fillet of Veal, begin at the top and help to the stuffing with each slice. In a breast of veal, separate the breast and brisket, and then cut up, asking which part is preferred.

In Carving a Pig, it is customary to divide it and take off the head before it comes to the table, as to many persons the head is revolting. Cut off the limbs and divide the ribs.

Colour for Kitchen Walls.—There is a prevailing fault existing in the selection of colours for kitchens, they being almost always dark, when they should be light, airy and cheerful. A light gray, or stone colour, is desirable. The use of yellow ochre in colouring the walls of rooms is condemned by *The Builder*. The occupants of such apartments, it says, invariably complain of pain in the forehead and eyes, often being unable to work. When the walls are cleaned of the ochre and whitewashed, these ailments entirely disappear.

To make a Feather Brush.—Select even and pretty feathers, string them with a needle and fine strong twine through the stem, at the base of the feathered part above the bare quill; then hammer the quills flat so as to make them lie close to the handle. Wet the handle with strong glue, secure one end of the string, and wind the strung feathers around and around the stick until the brush reaches the required size. As you wind, bind the stems close to the stick with twine, and in finishing the last row, bind them tightly and evenly by winding the twine on the outside over all the quills. Meanwhile keep the quills wet with glue that the brush may be firm when dry. The twine is then neatly covered by a cap of enamelled cloth, or you may use morocco or any fancy leather, with the edge pinked of any required size, Sew the edges firmly and secure it to its place with glue.

How to Light a Fire.—All housekeepers have at some time realized the difficulty of lighting a fire in a still, damp morning, when the chimney will not draw, and vigourous blowing proves ineffectual. Science explains the trouble as caused by the difficulty encountered in overcoming the inertia of the long column of air in the pipe or chimney, by the small column of air that can be forced up through the interstices of wood and coal, at the bottom of which the fire is kindled. This may be remedied by first lighting a few bits of shavings or paper placed upon the wood; thus, by the heated air forcing itself into the chimney and establishing there an upward current, the room is kept free from the gas or smoke which is so apt to fill the room, and the fire can then be lighted from below with good success.

By far the most economical way to light a fire is from the top. Clean out the grate, put in a good layer of cinders and coal nuts, then on top of this the wood. The fire obtained will be nice and clear, the smoke will be of the smallest quantity and little trouble will be found with the column of cold air in the chimney. The objection to this way is that it takes a much longer time than the ordinary way and this militates its general adoption.

How to Select Flour.—(1) Look at its colour; if it is white with a slightly yellowish or straw colour tint, it is a good sign. If it is very white with a bluish cast, or with black specks in it, the flour is not good. (2) Examine its adhesiveness—wet and knead a little of it between the fingers; if it works dry and elastic, it is good; if it works soft and sticky, it is poor. (3) Throw a lump of dry flour against a dry, smooth, perpendicular surface; if it adheres in a lump, the flour has life in it; if it falls like powder, it is bad. (4) Squeeze some of the flour in your hand; if it retains the shape given by the pressure, that too is a good sign. Flour that will stand all these tests is safe to buy.

To Wash Hair Brushes.—Fill a pan with hot water, with a piece of soda dissolved in it—say a quarter of an ounce to half a gallon of water. Comb the loose hair out of the brushes ; take one brush at a time by the handle and dip it in the water without wetting the back of the brush. It must be dipped several times Then rinse in cold water, and put near the fire or in the open air till dry. Another good way is to dip them two or three times in a pint of warm water, to which has been added less than a teaspoonful of spirits of ammonia. Rinse immediately in clear water, and dry about the stove.

Kitchen Measurements.—One quart of wheat flour is one pound.

One quart of corn meal weighs eighteen ounces.

One quart of butter, soft, weighs sixteen ounces.

One quart of brown sugar weighs from a pound to a pound and a quarter, according to dampness.

One quart of white sugar weighs one pound.

Ten medium sized eggs weigh one pound.

A tablespoonful of salt is one ounce.

Eight tablespoonfuls make a gill.

Two gills, or sixteen tablespoonfulls, are half a pint.

Sixty drops are one teaspoonful.

Four tablespoonfuls are one wineglassful.

Twelve tablespoonfuls are one teacupful.

Sixteen tablespoonfuls, or half a pint, are one tumblerful.

The Kitchen Sink.—Have your sink in a convenient place, but never under a window if you can avoid it, as much work is caused by greasy dishwater spattering upon the window, as it necessarily must. Back of your sink nail up a piece of varnished paper, and then you can with a wet cloth remove all spots that would soon spoil room paper

How to make nice Candles.—Melt together ten ounces of mutton tallow, quarter of an ounce of camphor, four ounces of beeswax, and two ounces of alum; then dip or mould them as usual. Candles thus manufactured it is said, furnish a most beautiful light.

To Clean Oilcloth.—Oilcloth requires careful treatment, and should never be scrubbed with a hard brush and soap, but after first being swept with the long handled hair brushes that are made for the purpose, it should be carefully washed. To ruin them, clean them with hot water or soap suds, and leave them half wiped, and they will look very bright while wet, and very dingy and dirty when dry, and soon crack and peel off. But if you wish to preserve them, and have them look new and nice, wash them with soft flannel and lukewarm water, and wipe them thoroughly dry. If you want them to look extra nice, after they are dry, drop a few spoonfuls of milk over them, and rub them with a small, dry cloth. Another good way is merely to be rubbed with a flannel, and polished with a brush of moderate hardness, exactly like a mahogany table, and by this simple means the fading of the colours, and the rotting of the canvas, which are inevitably attendant upon the oilcloth being kept in a state of moisture or dampness, are entirely avoided. They may also be cleaned with a mixture of magnesia only milkwarm, followed by warm water, in the same manner that carpets are cleansed. They should be rubbed with dry flannel until nearly dried, then wet over with a sponge dipped in milk, and immediately dried and rubbed with a flannel till the polish is restored. This is a process much to be preferred to that of rubbing the cloth with wax, which leaves it sticky and liable to retain dust and dirt for a long time. Very hot water should never be used in cleaning floor cloth, as it brings off the paint.

To Peel Peaches Rapidly.—Take a kettle of very strong lye, and heat to boiling; take a wire cage, similar to corn popper—fill it with peaches and dip into the lye for a moment—then into cold water. With a coarse towel wipe each peach, and the rind will peel off smoothly; then drop into fresh cold water and the operation is complete, leaving no trace of the lye.

To Pickle Peaches and Pears.—To pickle peaches wipe the fuzz all off with a cloth; put into a crock and put on spiced vinegar hot, but use twice or three times as much sugar as for cucumbers. Pour off the vinegar after a few days, heat and return it; repeat this two or three times, and the fruit will be made excellent. Some people stick cloves into the peaches before packing them, but they are not much beautified by the operation, and if spicing is the object any one can use as much as they choose in the vinegar. Treat pears in the same way, only they should be put through the softening process before packing. Steam them until they can be easily pierced by a straw, and handle carefully. A large spoon will be found better than a fork for transporting them from steamer to crock. A little cinnamon added to the spice bag is a benefit.

To Pickle Meat in One Day.—Get a tub nearly full of rain or river water, and put two pieces of thin wood across it and set the beef on them, distant about an inch from the water. Heap as much salt as will stand on your beef and let it remain twenty-four hours; then take the meat off and boil it, and you will find it as salt as if it had been in pickle for six weeks, the water having drawn the salt completely through the beef.

Fruit Canning.—Porcelain lined vessels are best for cooking the fruit, but many use a bright tin pan or pail, and for sweet fruit, brass can be used without detriment. It is a good practice to put a wash boiler, containing a pailful of water, over the fire, and after filling the jars with fruit, scald it by standing them in the boiling water. Seal while it is boiling hot. To prepare the fruit for the cans heat a kettle of water to boiling, set over it a bright tin pan containing the fruit, cover it close, and let it thoroughly scald. This requires more time than to set the pan directly upon the stove, but all danger of burning is avoided, and the fruit kept unbroken. At least, it is kept as nearly unbroken as can be expected of ripe fruit after cooking.

Fruit should be nearly or quite ripe. It is not best to risk a great deal for the mere looks of the sauce when set upon the table. Those who wish their canned peaches, pears, quinces, etc., to look fresh, must can them half ripe. Plenty of such specimens are sent out yearly from some of the large establishments—very beautiful to look upon, but not at all wholesome for food.

To Preserve Citron.—Peel the citron, take out the seeds, then cut into quarters and put in a preserving kettle, and add some water, cover tight, and boil until you can thrust a straw easily through them; then skim out carefully, so as not to break them. To one pound of citron use three quarters of a pound of sugar, of the best white, adding lemon as you prefer, removing the seed, or they will render the whole batch bitter.

Add the sugar to the liquor you boil the citron in; boil to a nice syrup; add the citron a little at a time; when done, skim out, keep doing so until all are cooked; add your lemons, cook a few minutes more, and pour over your citron.

To Preserve Quinces.—Peel, quarter and core; boil until tender; skim out, and do not use the liquor they are boiled in, but use it for jelly; also the peels and cores. Make a syrup of the sugar, using pound for pound; add the quinces, a few at a time; boil until done; pour this syrup over the quinces. Make the juice jelly the usual way.

Present Use Pickles.—For cucumbers, the best mode I have ever found is to soak them in a brine made of one quart of salt to one gallon of water, for twenty-four hours, then put them into a brass or copper kettle, cover with alum water, and scald up nearly to a boiling heat, and then take them out and wipe dry. The amount of alum used should be a lump the size of a cob nut to four quarts of water. After scalding and wiping, pack in a stone crock and heat vinegar enough to cover them and pour on boiling hot. The pickles are made much better by seasoning the vinegar with spice and sugar. Before heating it up, add to each gallon one teacupful of sugar and one half ounce each of allspice and cloves, ground and tied up in a cloth. If spices are put in loose they will stick to the pickles and cause them to be spotted. I have used in place of the spice, a root of horse radish, which answers a good purpose, and gives a flavour which many relish. If it is desired to have the pickles of a dark green colour, put a few leaves from the grape or cucumber vine into the alum water when scalding. Large sized cucumbers—not ripe—may be made good for immediate use by cutting them lengthwise into four parts, scald them in salt water, then rinse in boiling fresh water, let them drain awhile, then pack in a crock and add the hot spice vinegar made as for others.

Salting Cucumbers for Pickles.—Where a large amount of cucumbers are to be preserved, the best way is to pack in dry salt. Pick from the vines, cutting the stem half an inch or more long, and do not wipe with a cloth, but clean if they require it by rinsing carefully in water. Pack closely, but not so as to mar the rind; fill all the interstices with salt. Cover with three or four thicknesses of cloth; put on a plank follower with a stone weight upon it. Every time a new lot is added rinse the scum from the cloth, and as much oftener as it collects in any noticeable quantity. A portion may be taken out any time, and after freshening, scald in alum water and proceed as in mode given for present use pickles.

Sugar and Salt for Pickles.—Sugar in pickles of any kind is a great benefit; it not only gives a rich taste to the fruit, but it invigorates the vinegar and sustains its life. Salt is of no benefit to any fruit or vegetable to be made into pickles, save those like the cucumber or watermelon, composed of ninety per cent. water. The salt draws out the water and puts them in proper condition for the vinegar. If the water is not extracted by this means, the vinegar will absorb it, and become greatly diluted, and the pickles will not be first quality. For this reason cucumbers for long keeping should be put down in dry salt; plenty of brine will be made by the juice of the vegetable.

Potatoe Vinegar.—Take quite a quantity of common Irish potatoes, and wash them until they are thoroughly clean; then place them in a large vessel, and boil them until done. Now drain off carefully the water that they have been cooked in, straining it if necessary, in order to remove every particle of the potatoe. Put this potatoe water into a jug or keg, which place near the stove or in some place where it will be kept warm, and add one pound of sugar to about two and one half gallons of the water, some hop yeast, or a small portion of whisky. Prepared in this way, and after standing three or four weeks, you will have most excellent vinegar. Water may be saved when boiling potatoes for the table, if the vegetables are scarce.

Sofa Covers—If the covers of sofas and chairs are dirty, they may be cleansed without being removed, by first washing them over with a flannel, then, before they are dry, sponge them over with a strong solution of salt and water, in which a small quantity of gall has been mixed. The windows of the room should be opened so as to secure a perfect drying, and the colours and the freshness of the articles will in this way be restored.

To Brighten Straw Matting.—Wash it in brine made by dissolving a pint of salt in a pail of water. It is said that the salt will keep the straw from turning yellow.

To Clean Straw Matting—Take a pan half full of hot water, a perfectly clean, long handled mop, and a dish of dry, unsifted Indian meal. Sweep all dust off the matting, then scatter the dry meal evenly over the room. Wring the mop so dry that it will not drip at all, and rub hard, one breadth at a time, always lengthwise of the straw, and use clean water for each breadth. When the matting is dry, the meal can be swept off easily; it should always be done on a dry day.

A Hoop Skirt.—When a hoop skirt is soiled, put it into a tub of hot suds, and rub it with a clean scrubbing brush or whisk broom. Rinse it and hang it in the sun. It will be whitened, but be a little stiffer than before.

To make a Sweeping Cap.—For the pattern of this cap, cut of paper a complete circle, the diameter of which is twenty-one inches. Double this paper by creasing through the centre, and trim one inch off the side. This will make the cap when cut, shorter by two inches from side to side, than it is from back to front. For the materials of the cap get five-eighths of a yard of light blue, pink or green Chambery; cut by the pattern, turn the edge under by a narrow hem, and then upon the right side of the goods, one inch and a quarter from the edge, stitch a narrow bias band of Lonsdale cambric entirely around the cap. This is designed to hold the rubber cord which draws the cap into shape and size to fit the head. The edge may be prettily finished by sewing on a narrow cotton trimming or lace, or it can be bound with the cambric instead. After inserting a rubber cord between the bias band and Chambery, and drawing it to the size of the head, the cap is completed by placing a tiny bow of ribbon upon the left side in front, and another with streamers on the back. The bows may be made of the same goods and bound with cambric, if it is preferred. The cap is worn with the longer diameter from back to front, and when shaped by deft fingers looks not unlike the fashionable "Normandy Cap." Pink bows are pretty on light green caps, and light blue upon pink.

To Cleanse Wool.—Put as much water in a tub or barrel as you want to use at one time; add salt enough to make a weak brine; then add to this a gallon or two of chamber lye; then dissolve enough soda to make a good suds when stirred, soft water is best, and the whole should be warmed. Put in as much wool as your vessel will hold, and let it soak overnight; wash it out, rinse in clean, warm water, and your wool will be clean and white. Tanners and glove makers will find this the very thing to clean the wool on lamb and sheep skins, for gloves and mittens.

To take Impressions of Coins.—Melt a little isinglass glue with brandy, and pour it thinly over the metal, so as to cover its whole surface; let it remain on for a day or two, till it is thoroughly dried and hardened, and then taking it off it will be fine, clear, and as hard as a piece of glass, and will have a very elegant impression of the coin. It will also resist the effects of damp air, which occasions all other kinds of glue to soften and bend if not prepared in this way.

How to Harden a Poker.—The fire poker, by constant use, becomes soft, and is generally more or less bent. This arises from its being left in the fire and becoming red hot, then being put on the fender, where it slowly cools,—an operation which softens even the best steel. When the poker has thus become soft and bent, it may be again hardened by making it hot two or three times, and plunging it every time that it is heated into a pail of cold water.

To make Matches Waterproof.—It is said that friction matches can be made perfectly water-proof under any circumstances, by dipping them, when completed in the ordinary way, in a solution formed by adding two parts of glycerine to one hundred of collodion.

How to mend a Kettle.—Holes in the bottom of iron kettles may be stopped by driving in plugs of lead, and heading them down on both sides of the iron. So long as water is in the kettle the lead will not melt. A cement said to be good is made by mixing six parts of well pulverized, dry clay, and one part iron filings; make into a paste with boiled linseed oil.

A cheap Gilding.—By rubbing a metallic surface with soda amalgam, and pouring on a solution of chloride of gold, gold is taken up by the amalgam, and it is only necessary to drive off the mercury by heat, to obtain a gilded surface that will bear polishing.

To Improve Gilding.—Mix a gill of water with two ounces of purified nitre, one ounce of alum, and one ounce of common salt; lay this over gilt articles with a brush, and the colour will be much improved.

To make Writing look Old.—Take one dram of saffron, and infuse it into one-half pint of ink, and warm it over a gentle fire, and it will cause whatever is written with it to turn yellow, and appear as if of many years standing.

To take Tin from Copper.—Tin can be removed from copper vessels very thoroughly by immersing the objects in a solution of blue vitriol.

Home-Made Stove Blacking.—Black lead well mixed with white of egg is a good stove blacking. Lay on with a paint brush, and when dry polish with a hard brush.

Lacing for Sewing Machine Belts.—An old kid glove makes excellent lacing for securing small belts on sewing and other machines. Cut the gloves into strips half an inch wide, and roll them up tight.

To mend Rubber Hose.—Cut the hose apart where it is defective; obtain a piece of a shot gun barrel or iron pipe ten or twelve inches long; force the hose over it until the ends meet, and wrap with strong twine well waxed.

To prevent Boilers Corroding.—Protzen recommends the introduction of a piece of zinc into a boiler. This determines a galvanic current which protects the iron against oxidation and corrosion, and causes the mineral ingredients of the water to be deposited as a fine, loose mud, entirely preventing the formation of a "crock."

To detect Escaping Gas.—It is usual to detect gas escapes by applying a lighted taper or candle to the suspected place of leakage. A safer mode is as follows: Mix soap and water in the proportion of two pounds of the former to five or seven pints of the latter. The sticky liquid so obtained is ready to be applied with a brush to the gas pipe, when, if an escape is taking place, bubbles will readily be seen on the liquid, and the position of the escape indicated without any danger.

To make Modelling Clay.—Knead dry clay with glycerine instead of water, and a mass is obtained which continues moist and plastic for a length of time. This removes one of the greatest inconveniences that is experienced by the modeller.

How to Soften Resin.—Melt the resin, and while in a state of fusion add tar. The proper degree of hardness can be ascertained by dropping a small portion of the melted mass into water.

To Button a Stiff Collar.—Well laundried collars and cuffs are too stiff to button without considerable trouble, They may be instantly made pliable at the button hole by touching the tongue to that spot.

To stop a Mouse Hole.—Use plugs of common hard soap, and you will do it effectually; rats, roaches and ants will not attempt to get through it.

Cleaning Gutta-Percha.—This can be done by using a mixture of soap and powdered charcoal, polishing afterward with a dry cloth with a little charcoal on it.

Filling Cracks in Ceilings.—Whitning mixed with glue—water or calcined plaster and water, makes a good putty for filling cracks in plastered ceilings.

How to Bleach Sponge.—Soak the sponge well in diluted muriatic acid for twelve hours. Wash well with water, then immerse it in a solution of hyposulphite of soda, to which diluted muriatic acid had been added a moment before. After it is bleached sufficiently, remove it, wash again and dry it. It may thus be bleached almost snow white.

To Clean Stone.—Boil a pound of pipe clay in three pints of water and a quart of vinegar; put in a bit of stone blue. Wash with this mixture, and when quite dry, rub with dry flannel and a brush of moderate stiffness. Sweep off the fine dust thus raised with a clean hand brush.

To Tin metallic Substances.—Plates, or vessels of brass, iron or copper, boiled with a solution of stannate of potass, mixed with turnings of tin, become in the course of a few minutes covered with a firmly attached layer of pure tin. A similar effect is produced by boiling the articles with tin filings and caustic alkali, or cream of tartar.

Uniting Lead and Zinc—These two metals do not really unite. When melted together and allowed to cool slowly, the lead falls to the bottom. If kept together in fusion and repeatedly stirred, the zinc sublimes with great rapidity.

To mend a Water Pot.—When a water pot rusts through where the sides join the bottom, it is not necessary to throw it away, as the holes may be effectually stopped without going to the tinker's, by covering them inside with a small piece of linen dipped in copal varnish, the tin being previously thoroughly dried. When the varnish hardens by drying, they are perfectly water-tight.

To remove Finger Marks.—Ammonia will remove finger marks from paint, where there would otherwise have to be a good deal of scrubbing with soap which takes the paint off also.

To Test Coins.—The best test for a suspected coin is to weigh it against a piece which is evidently genuine. The instrument called a "detector," used for bending coin, does not prove that a coin is not genuine; neither does "ringing it," for genuine coins may be easily rendered "dumb" by a crack. Counterfeit silver coins are most easily detected through the difficulty of imitating the "milling" or "lettering" on the edge.

To Marble the edge of a Book.—Dissolve four ounces of gum arabic in two quarts of clear water; then provide several colours mixed with water in pots or shells, and with pencils peculiar to each colour, sprinkle them by way of intermixture upon the gum water, which must be put into a trough, or some broad vessel, then with a stick curl them or draw them out in streaks to as much variety as required Having done this, hold the book or books close together, and only dip the edges in on the top of the water and it colours very lightly; which done, take them off, and the plain impression of the colours in mixture will be upon the leaves; doing as well the end as the front of the books in the same manner.

Test for Gold and Silver.—One test for gold and silver is a piece of lunar caustic. Slightly wet the metal to be tested and rub it gently with the caustic. If gold or silver, the mark will be faint; but if an inferior metal, it will be quite black.

How to Silver Ivory.—Immerse a small slip of ivory in a weak solution of nitrate of silver, and let it remain until the solution has given it a deep yellow colour; then take it out and immerse it in a tumbler of clear water, and expose it in the water to the rays of the sun. In about three hours the ivory acquires a black colour but the black surface on being rubbed off soon becomes changed to a brilliant silver.

To Prevent Boiler Scales.—Many substances are employed for the purpose of preventing the formation of scales in boilers. Among these, which act chemically, are soda ash, chloride of barium, carbonate of ammonia, chloride of ammonia, and tannin or extract of oak bark,

Use for Pumice Stone.—Pumice stone in lump is excellent for scouring wood in finishing work; for domestic scouring, for reducing corns on the feet, and in powder, it is the best material for scouring down varnish, and no one need have rough and dirty or stained hands, who will use it when required.

To Bronze Plaster Casts.—To make a good green bronze, such as is used for French statuary, dissolve one ounce sal ammoniac, three ounces cream tartar, six ounces common salt, in one pint of hot water; add two ounces copper nitrate in a pint of hot water. Mix well together and apply with a brush.

Aniline Bronzing Fluid.—Take ten parts of aniline red and five of aniline purple, and dissolve in one hundred parts of alcohol at 95 degrees, taking care to help the solution by placing the vessel in a sand or water bath. As soon as the solution is effected, five parts of benzoic acid are added, and the whole is boiled from five to ten minutes, until the greenish colour of the mixture is transformed into a fine, light coloured bronze. This bronze is stated to be very brilliant, and to be applicable to all metals, as well as to other substances. It is easily laid on with a brush, and dries promptly.

Beautiful Black Colour for Bronze.—A strong, concentrated thin solution of nitrate of silver is required for this purpose. It should be mixed with an equal solution of nitrate of copper, and well shaken together. The pieces which require colouring are dipped into this solution and left for a short time. When taken out, they should be equally heated till the required black colour makes its appearance.

Use of Stucco.—This substance, much in use for walls, pillars, etc., is at present prepared by mixing plaster of Paris with a solution of gelatine or glue, instead of with water. This, while stiffening more slowly, becomes much harder than with water alone. When the mass has been suitably applied, and sufficiently hardened, the surface is to be moistened and rubbed down with pumice stone until smooth. It is finally to be coated by means of a brush with a concentrated solution of gelatine, and when perfectly dried, it may be polished with tripoli on a buffer.

Cheap Ash Sifter.—Take an old flour barrel, bore two holes eight inches from the top and eight inches apart through the staves, then two more directly opposite. Use a three-quarter auger and drive in old broom handles. This makes a platform for the sieve to rest upon. Next, cut out a piece of stave on one side between the holes and above them for the sieve handle to work in. Fit a board over the top for cover and the thing is complete.

To Make deep Gold Lacquer—Seed-lac, three ounces; turmeric, one ounce; dragon's blood, one-fourth ounce; alcohol, one pint; digest for a week, frequently shaking, decant and filter. Lacquers are used upon polished metals to impart the appearance of gold. If yellow is required, use turmeric, aloes, saffron or gamboge; for red, use annotto or dragon's blood to colour. Turmeric, gamboge and dragon's blood generally afford a sufficient range of colours.

To preserve Flower stakes—Take common coal tar and bring it to the boiling point in a kettle some twelve inches deep; place the lower part of stakes in the boiling tar, immersing them as deeply as the pot will allow. After they have remained therein about ten minutes, take them out, allow the surplus tar to drain off, and roll the hard portion in clean, sharp sand, covering every part of the tar. After they have become perfectly dry, give them another coat of tar, completely covering the sanded part.

To Make an Æolian Harp.—Of very thin cedar, pine or other soft wood, make a box five or six inches deep, seven or eight inches wide, and of a length just equal to the width of the window in which it is to be placed. Across the top, near each end, glue a strip of wood half an inch high and a quarter of an inch thick, for bridges. Into the ends of the box insert wooden pins, like those of a violin, to wind the strings around, two pins in each end. Make a sound hole in the middle of the top, and string the box with small cat-gut or blue first-fiddle strings. Fastening one end of each string to a metallic pin in one end of the box, and, carrying it over the bridges wind it around the turning pin in the opposite end of the box, The ends of the box should be increased in thickness where the wooden pins enter, by a piece of wood glued upon the inside. Tune the strings in unison and place the box in the window. It is better to have four strings, as described, but a harp with a single string produces an exceedingly sweet melody of notes, which vary with the force of the wind

A Cheap Lactometer.—A cheap milk tester may be made by getting a glass bulb and stem, both hollow, and loading the bulb with shot until the instrument will float upright in pure milk, Mark on the stem the point to which it sinks—the surface point. Remove it from the milk and float it in pure water, marking the surface point as before, which will be considerably higher on the stem than the other mark. Now take a narrow slip of paper, capable of being rolled lengthwise, and insert it in the stem of the instrument so that the figures on it will be visible through the glass. Lay off on this, in the direction of its length, a space equal to the distance between the two surface points, numbering the one 0 and the other 100. Subdivide this space into ten or twenty proportional spaces, correspondingly numbered; roll the slip and insert it in the stem until the 0 is at the surface point of the milk, the 100 at the point of the water. Your lactometer is now complete. Float it in your milk can every morning, and the depth to which it sinks will register the percentage of dishonest water, if any, which the milk contains.

Cheap Burglar Alarm.—It is simply a little brass wedge with a small piece of the same metal attached to its sloping side. The wedge has only to be pushed from the inside, between the closed door and the door sill.

No other fastening is necessary, as any attempt to open the door only tightens the wedge. A percussion cap may be inserted between the wedge and the piece of the metal riveted upon it; the slightest attempt to force the door will explode the percussion cap and frighten the intruder. This style of wedge may be made of hard wood, with a little piece of tin riveted on, under which to place the torpedo. In this case, the tin should begin low down at the sharp end of the wedge, so as to protect it. A hole may be bored in the wedge so that it may be temporarily secured to the floor (with a nail or pocket gimlet), about three inches in front of the door. In this way, any attempt to open the door is sure to meet with failure and detection at the same instant.

Substitute for Fire Brick.—When the fire bricks of a stove have burned away, a very good substitute may be used until new bricks can be obtained. Mix one part of salt with two parts of coal ashes, wetting with water. Apply this to the inside of the stove in the place of the fire brick. It hardens in a few hours, and answers a very good purpose. Cracks in stoves may be mended the same way, or the bottoms of well worn ash pails and coal buckets.

Enamel for Copper.—The beautiful enamelled surface may be produced, on a black ground, by the following process: Clean the copper with sand and sulphuric acid, and then apply the following mixture; two parts of white arsenic, four parts of hydrochloric acid, one of sulphuric acid, and twenty-four of water.

Bronzing Copper Urns.—The surface, first made thoroughly clean and bright, is covered with a thick coat of rouge and water; when dry, the article is placed in a clear hollow fire (say a chamber of bricks, red hot), for a short time, until the rouge has turned to the desired shade of colour. Then the article is placed on a suitable stand, and polished with a soft brush and rouge powder, and afterward with soft leather. The tinning and soldering are subsequent operations.

To Clean all Sorts of Metals.—Mix half a pint of refined neat's-foot oil, and half a gill of spirits of turpentine. Scrape fine a little rotten stone, wet a woollen rag, dip it into the scraped stone, and rub the metal well. Wipe it off with a soft cloth, and polish with dry leather.

How to Weld Copper.—According to a German writer, copper may be welded perfectly by means of a powder, consisting either of pure salt of phosphorus or of a mixture of this with boracic acid. The latter is cheaper, but does not give quite so fluid a slag as the former. The welding powder is to be scattered over the copper after being brought to a red heat, and then heated to a cherry red, or to an incipient yellow glow. The combination of the parts, when hammered together, is at least as perfect as that of iron.

To protect Lead Pipes.—Plaster of Paris offers the best protection for lead pipes. Wherever lead pipes pass through a wall they should be laid in gypsum, over which mortar or cement can then be safely laid.

Protecting Water Pipes in Winter.—In pumping up water into the cistern for the water-closet, be very particular in winter time. Let all the water be let out of the pipe when done; but if this is forgotten, and it should be frozen, take a small gimlet and bore a hole in the pipe, a little distance from the place where it is let off, which will prevent its bursting. Put a peg into the hole when the water is let off. When the frost begins to set in, cover the exposed water pipes with hay or straw bands, twisted tight round them.

Strength of Ropes.—A good rope, one inch in diameter, will bear, it is estimated, about 5,000 lbs., but should not be subjected to more than half this strain. Wire rope is more than twice the strength of hemp rope of the same circumference; splicing a rope is supposed to weaken it one eighth. The strongest description of hemp rope is untarred, white, three stranded rope; and the next in the scale of strength is the common three strand, hawser laid rope, tarred.

To Mould a Face in Wax.—Take a pound of new wax, a third of colophony; melt them at a slow fire; let the substance cool until you may endure some of it on your hand without burning it; then having oiled the face with olive oil, cover the hair of the eyelids and eyebrows with paste; then with a brush nimbly cover the face about the thickness of a quarter of a shilling, being careful not to stop the nostrils, and that the person does not squeeze his eyes together, because that will render the face deformed. Thus, having the face of wax, take it off gently and strengthen it with clay on the back side, that it may not give way. After this manner you may cast all sorts of faces—laughing, weeping, grimaces or wry faces.

To use the Siphon.—The siphon is a round tube bent in a half circle, or nearly so. To use it fill with water and plug both ends; then place one end in a bucket or vessel of any kind filled with liquid and open the ends. The liquid will go up the short end of the curved tube and continue to flow so long as the supply lasts. Another way to start a small siphon is to place one end while it is empty in the water and start the water running by suction. The siphon is a convenient thing to empty an aquarium with, as it does not disturb the fishes. Large siphons may be used to bring water from elevated wells to a residence; that is, the siphon brings the water to a point where conducting pipes are laid. By stopping the siphon at the discharge end it will readily start again when the flow is desired.

To take Impressions of Medals.—Melt a little isinglass glue made with brandy, and pour it thinly over the medal so as to cover its whole surface; let it remain for a day or two, till it be thoroughly dry and hardened, and then, taking it off, it will be fine, clear and hard as a piece of glass, and will have a very elegant impression of the coin.

Bricks for Keeping Fire.—Mix coal, charcoal, or sawdust, one part; sand, of any kind two parts; marl or clay, one part; in quantity as thought proper.

Make the mass up wet, into bricks or balls of a convenient size and when the fire is sufficiently strong, place these bricks according to size a little above the top bar, and they will produce a heat considerably more intense than common fuel, and insure a saving of one-half the quantity of coals. A fire thus made up will require no stirring, and will need no fresh food for ten hours.

To Imitate Ivory.—Make isinglass and brandy into a paste, with powdered egg shells very finely ground. You may give it what colour you please; but cast it warm into your mould which you previously oil over. Leave the figure in the mould till dry, and you will find on taking it out, that it bears a very strong resemblance to ivory.

How to Thaw out a Water Pipe.—Water pipes usually freeze up when exposed, for inside the walls, where they cannot be reached, they are or should be packed to prevent freezing. To thaw out a frozen pipe, bundle a newspaper into a torch, light it, and pass it along the pipe slowly. The ice will yield to this much quicker than to hot water or wrappings of hot cloths, as is the common practise.

How to Test a Thermometer.—The common thermometer in a japanned iron case is usually inaccurate. To test the thermometer, bring water in the condition of active boiling; warm the thermometer gradually in the steam and then plunge it into the water. If it indicate a fixed temperature of two hundred and twelve degrees, the instrument is a good one.

To protect fruit from Birds.—Take a ball of brown thread, fasten the end of it to one of the twigs of the tree or bush, and then cross the thread backward from twig to twig in perhaps a dozen different directions, fasten, and the thing is done; and it will last two years. The birds come boldly to settle on the trees and they strike against these, to them, invisible snares, and they fly off in a terrible hurry, not to return again.

Pruning Rose Bushes.—Upon those rose bushes that bloom but once a year—summer roses as they are called—it is best to prune pretty severely as soon as the period of blooming is over, unless it should be very dry, in which case defer pruning until just as the fall growth begins. By this course abundance of young spurs or shoots, for flowering the next season, are produced.

To protect Rose Bushes.—To three gallons of soft water add one peck of soot and one quart of unslaked lime; stir it well, let it stand for twenty-four hours, and when the soot rises to the surface, skim it off. Use a syringe for applying it. This wash entirely removes small green vermin so commonly infesting rose bushes.

To Layer Roses.—Use shoots of the young growth—that is growth of three or four weeks old, or such as are not so much ripened as to drop the leaves, or in other words, the cut should always be made at that part of the shoot where there are as green and healthy leaves below as above the cut. This condition of the shoot is very important, in order to produce a well rooted layer. A slit cut like a tongue one inch long should be made in the branch which is put down. Some cut on the lower part of the branch, others on the top. Make a trench in the ground and bend the branch down into it, securely fastening it down with pegs on each side, then cover well with earth, leaving three or four inches of the end of the branch out of the ground. If the season is dry, watering will be necessary.

To Layer Shrubs Generally.—Any desirable shrubs can be layered the same way as roses, except that it is not so important to put down new fresh growth. If a branch is used which has a number of smaller ones growing off from it, and covered so as to leave the ends of each out, root will be formed on each of the little branches. The tea olive roots beautifully in this way, but is difficult to grow from cuttings in the open ground. The oleander and rhododendron will also root finely by this last plan. Layering carnations is often the only method of increasing some of the choice varieties. They must be put down in the same way as roses, the tongue being cut just below a joint.

Thawing Out Plants.—In case of frozen house-plants the following treatment is said to restore them uninjured: Allow the plants to remain where they were frozen; darken the room as completely as practicable, and sprinkle them with water direct from the cistern. A few drops of spirits of camphor put into the water will render it all the better. Do not allow the room to become warmer than forty-seven degrees for twenty-four hours. Although the water may freeze in drops on the leaves when sprinkled, the plants will come out unharmed if this treatment be strictly adhered to.

To make a Scrap Book.—Scrap books, as they are generally made, are rough, ungainly affairs, caused by the curling of the leaves of the book to which the scraps are attached. Mucilage, as generally purchased, will penetrate printing paper and give it a semi-transparent appearance; so it should not be used. Use good flour paste, and only apply this to the edges and corners of the scrap to be attached. By this method you will find no wrinkling, but have a flat, smooth scrap book.

Shelter for Coal.—Experiments have proven that bituminous coal exposed to the weather suffers loss in weight as well as in gas making quality. From this it will be understood that coal should be kept dry and under cover; and that to expose it to rain or damp is to lessen its quantity and weaken its quality. Here, too, we have an explanation of the inferiority of the great heaps of small coal which encumber the ground in the mining districts.

Depth for strength in Timber.—J. Scott Russell says: The value of increasing the dimension in the direction of the greatest strain is mechanically expressed in the simple formula—that strength against a given strain is increased in proportion to the square of the depth; whereas, if it be given in the contrary direction, it is only strong in proportion to the simple breadth.

"As it is usual to call depth of a piece its direction of greatest strain, and width the direction at right angles to this, the formula is summed up in saying that the strength of a piece of timber is proportioned to its breadth simply, and to the square of its depth.

"Taking, then, a piece of timber twice as broad as another, it will be twice as strong; taking a piece of timber twice as deep as another, it will be four times as strong; so that the gain of increased depth over increased breadth is manifest. It must never be forgotten that to gain increased depth one way at the cost of diminished breadth the other way, is to weaken that piece against any strain to which it may happen to be exposed in the direction of its thinness."

To manage a wet Silk Hat.—When a silk hat gets wet do not attempt to wipe it dry, neither allow it to dry as it comes from the storm; either treatment will ruin it. When partly dry, wrap a dry towel around it to absorb dampness, moving the towel a little with the lay of the silk. When nearly dry rub with hot cloth until smooth, bright and glossy.

To Pack A Trunk.—In packing a trunk, put the large and heavy articles, and such as will not be damaged by pressure at the bottom, If the trunk is not full, take newspapers, spread them out to full width, then from the edges crush them together, forming elastic bunches. Put these in vacant space, and thev will hold the articles below in place, and secure against damage.

A Water Telescope.—Take four pieces of half inch board, any length you desire. The length should be governed by the depth of the pond or lake it is to be used upon. Have two of the pieces five inches wide, and two, three inches wide. These, when nailed together, will form a tube four by five inches square. Before nailing together. one inch from one end of each piece, saw the boards half off. This will form a gain or kerf, into which is to be fitted a piece of window glass. Put together after coating all the joints with white lead paint. Put paint also in the glass grooves. You will have a very good submarine telescope. The tube glass-end is to be shoved down into the water, by use of sinkers. It is improved by covering the head with a shawl.

To Imitate Ground Glass.—A ready way of imitating ground glass is to dissolve Epsom salts in beer, and apply with a brush. As it dries it crystallizes.

DYES AND DYEING.

To Colour Blue.—There are very many different modes for dyeing blue; the most of them, however, embody as chief materials either woad, aniline or indigo. Woad contains colouring material so very similar to that of indigo, and so much less in quantity, that the latter is almost always used, or was before the advent of aniline. Almost every farmer's wife and daughter knows how to make the old-fashioned blue dye, yet all of them do not know how to make it *right* or how to treat the fabric to obtain the best results.

The Saxon Blue.—The Saxon blue is very pretty and permanent, and not difficult to make. The dye for silk and wool is made in small amounts by dissolving one ounce indigo in four ounces concentrated sulphuric acid; to this solution add one ounce of dry carbonate of potash, then dilute the whole with eight times the weight of soft water. This solution is called sulphate of indigo, and is ready to be used as soon as the fabric is prepared for it.

To prepare the clothes—or whatever is to be coloured—for the dye, wash clean and boil in a solution made by adding to water for every two pounds of fabric, five ounces of alum and three ounces of tartar; use enough water to cover the cloth. After boiling a short time drain out, and put into a water bath, to which has been added enough of the sulphate of indigo to make the shade you desire, and boil until colour is well taken.

The best way is to use no more water for the bath than is required to cover the fabric; heat it up, add the sulphate of indigo, and obtain the right strength by testing it with a small piece of cloth before the articles to be coloured are put in. After the required shade is obtained, rinse, stretch and iron the usual way.

Common blue dye.—A common blue dye for woollen goods is made by powdering fine half an ounce of Spanish indigo, and pouring upon it half a pound of oil of vitriol, stir well together, add a lump of pearlash the size of a pea, and as soon as fermentation is ended, bottle, and it will be fit for use in twenty-four hours. Make the dye to suit the fancy by putting the solution in warm water. Wash the articles to be coloured well, and after remaining in the warm dye long enough to get the desired shade take out the fabric and dry it, then wash in lukewarm suds, and rinse.

Another Formula—Dissolve two tablespoonfuls of copperas in four gallons of water; wet the goods in warm suds, and let them remain ten minutes in the copperas water; dissolve half a pound of prussiate of potash in four gallons of water; put the goods into it and let them remain five minutes; then remove, and add to the potash water one and a half tablespoonfuls of oil of vitriol, then put the goods again into the dye, and let them come to a boil; dry in the sun.

Permanent Blue for Wool.—Take two ounces of the best indigo, in fine powder, sufficient warm water, and add six pounds of wool in the grease; put the whole into a kettle large enough to contain all the wool to be dyed. As soon as the requisite colour is obtained, let the wool be well washed and dried. The liquor remaining may be again used to produce lighter blues. The colour will be as beautiful and permanent as the finest blue produced by woad, and the wool, by this method, will lose less in weight than if it had been previously scoured.

Blue for Cotten and Linen.—A good dye for these is made of one ounce each of indigo (Spanish is the best) and sulphate of iron, and two ounces of quicklime; dissolve in water and treat very similar to the mode given for dyeing silk and wool.

Shades of colour from Prussian Blue.—Impregnate each parcel of silk to be dyed with a different proportion of the oxide of iron by immersing it in a solution, the strength of which has been regulated accordingly. For the deeper tones of colour employ the acetate, and for the others the chloride or sulphate.

After having properly rinsed (in separate water) each parcel, it is to be dipped into distinct baths of the prussiate of potash, the quantity of which has been made to correspond with the quantity of oxide of iron previously united to it.

With these precautions all the desired shades may be obtained. Those which are light and have a greenish cast should be well washed in river water, which will soon produce the blue in its purity. If this does not happen, a very weak solution of muriatic acid will produce the effect to a certainty.

Aniline Blue.—Aniline I prefer to all other materials for colouring, and it is easily prepared. Blue aniline comes in crystals, and in this state has a very rich, purple shade, and is generally soluble only in alcohol, at least it is best to always use alcohol to cut the crystal. Dissolve two drams of aniline in four ounces of alcohol and bottle up; this amount of the solution is enough to make two gallons of dye.

After the fabric has been prepared for colouring by washing clean, first put into the amount of water used for the bath enough sulphuric acid to give it a sour taste, then add the solution in amount as above directed or to obtain desired shade; put in the cloth or yarn and heat gradually until it boils. Make the rinsing water a little sour with sulphuric acid; it is better than alum, at least for making blue permanent. It should be used only for wool and silk.

Cotten or linen goods should never be put into any dye containing sulphuric acid, for it will rot the fabric, but it has no injurious effect upon silk and wool. To colour cotton or linen, leave out the acid and use a little alum, but a good colour cannot be insured.

To dye Silk Blue.—Silk is dyed light blue by a ferment of six parts of bran, six of indigo, six of potassa, and one of madder. To dye it a dark blue, it must previously receive what is called a ground colour; a red dye stuff, called archil, is used for this purpose.

To dye old Dresses Black.—For four pounds of goods take two ounces of copperas and eight ounces of the extract of logwood, or, if you prefer instead, three pounds of logwood chips. Put each separately into twelve quarts of water, the logwood in an iron vessel, the vitriol in brass; bring both to a boiling heat, dip the cloth into the vitriol water first, then in the logwood water, and alternately from one to the other till it has been dipped in each three times. Then dry, wash in strong suds, rinse in cold soft water and press on the wrong side while damp. This colour does not rub off nor fade, and is good for silk, cotton or lace, but better for wool.

To dye Carpet Rags black.—A nice black may be made by soaking logwood chips in warm soft water, one day, to extract the strength; pour off the liquid and put in the rags or cloth and soak them thoroughly, turning often; after well saturated with dye take out the goods and air them. Add an ounce of copperas to the solution, and when dissolved put in the rags, raising and turning them every few minutes. After dyeing enough, hang them out, and when dry wash in suds and sweet milk; then rinse and you will have a colour to suit.

To dye Woollens black.—Take of nut gall and sulphate of iron each five parts, logwood thirty parts for every one hundred parts of cloth in weight. Prepare nut gall separate in decoction and boil cloth two hours in this; then two hours in bath composed of sulphate of iron and logwood. Keep up to a scalding heat, but do not allow it to boil. Frequently lift the goods to allow them to air. A little acetate of copper added to the last bath will tend to strengthen the colour.

To dye chip and straw hats black.—Put in a boiling bath of logwood for four hours. Remove and give an airing; add a little copperas to the solution, and repeat the boiling, and allow the liquid to cool down with hat in. After drying, dress with a sponge moistened with sweet or olive oil. Use but little oil and dress both sides, and press into shape.

Dyeing Silks Black.—The substances most commonly employed to give a black colour to fabricks are red oxide of iron, sulphate of iron, copperas, tannin, bichromate of potash and logwood. These substances have a strong affinity for each other, and when combined assume a deep black colour, not liable to be destroyed by the action of air or light.

Logwood is usually employed because it communicates lustre, and adds considerably to the fulness of the black. The dye for silks is prepared the same as that for wool. It is, however, capable of combining a great deal of tan, and the one using a dye can govern the matter to suit themselves. The sulphate of iron can be dissolved in double its weight of cold water, three-fourths its weight of hot or boiling water, but is insoluble in alcohol.

To dye silk stockings black.—These are dyed like other silk or woollen garments. At first they look like an iron grey; but to finish and black them, they must be put on wooden legs, laid on a table and rubbed with the oily rubber or flannel, upon which is oil of olives, and then the more they are rubbed the better. Each pair of stockings will require half a tablespoonful of oil, at least, and half an hour's rubbing, to finish them well. Sweet oil is the best in this process, as it leaves no disagreeable smell.

Butternut bark black dye.—Boil a large iron kettle full of butternut bark for four hours; take out the bark, put in a spoonful of copperas. If you wish a deep black put in more copperas—too much rots the goods. While the dye is boiling put in the goods with a stick. Keep watching and moving them till you get the shade required. If left folded or packed too tight they will be spotted.

To dye wool a chrome black.—Having cleaned the wool with soap and cream of tartar, take four ounces each of bichromate of potash and crude tartar to a kettle of water; put in the merino, boil for forty minutes, and after cooling, immerse in a bath made from four ounces of logwood chips with one-fourth of fustic chips to a kettle of water.

To dye cotton yellow.—Half a pound of sugar of lead dissolved in hot water, one-fourth pound of bichromate of potash, dissolved in cold water, in wood; dip first in one, then the other, until the colour suits. For orange, dip the above in strong lime water

Another Formula—.Wet six pounds of goods. thoroughly; and to the same quantity of water add nine ounces of sugar of lead, and to the same quantity of water in another vessel, add six ounces bichromate of potash. Dip the goods first into the solution of sugar of lead and next into that of the potash, and then again into the sugar of lead. Wring out dry, and afterwards rinse in cold water.

Yellow for Carpets.—A lady writes the author of this work, that there is nothing nicer to dye with than those spikes of yellow flowers that grow along old fences so abundantly, the golden rod. Gather only the flowers, boil them in a brass or copper kettle, skim out all the flowers and boil the goods half or three-fourths of an hour, stirring frequently. To set the colour use alum water, but not until after the goods have dried.

Another Formula.—Take a half bushel of the inside bark of apple trees, cut into small pieces; place it in a wash boiler; fill it three-fourths full of soft water, and let it boil eight hours; dissolve three ounces of alum in one gallon warm water; wet the goods with it; and wring out and place loosely in the dye; stir them round well, and after they have boiled five minutes hang out to dry in the sun. This will make a fast colour in either wool or cotton.

To dye golden chrome yellow.—Heat till boiling, stirring all the time, eight and a half ounces sugar of lead, sixteen and a half ounces litharge, three gallons of water. Keep boiling about ten minutes; leave to settle, decant, and while warm handle carefully in it the bleached cotton.

When the cotton is thoroughly impregnated with the subacetate of lead of the bath, dry it by a gentle heat, and place it in a bath of eight and a half ounces bichromate of potash and four ounces of nitric acid. Wash well with warm water. Afterwards dip it into a bath of two drams saffron to one quart of strong alcohol, until the desired tint is acquired. This is for cotton goods.

To colour Green.—To four pounds of fabric take one and one-half ounces oxalic acid, two ounces of Prussian blue; let each soak overnight in one quart of rain water, then put together in as much warm rain water as you want to colour with. Put in the fabric and let it be in twenty minutes. Wring out and dip in the following yellow dye:

Take six ounces of sugar of lead, four and a half ounces of bichromate of potash; dissolve in a pint of hot rain water. Take as much hot rain water as you want to colour with. Dip first in the lead, then in the potash several times. Rinse in cold rain water. Use tin or copper—no simmering is needed. The first makes a blue, the last a beautiful yellow, and both a durable green.

Another Formula.—Take two pails and put six quarts of cold or lukewarm water in each; into one of them put three ounces of sugar of lead, into the other six ounces bichromate of potash, and let it thoroughly dissolve; then take five pounds of white fabric and dip into the lead water first, then in the other, then back and forth till the colour suits. It will make a beautiful yellow. Then make a strong blueing water with two or three bottles of liquid blueing and dip in it, and you will have a very pretty green. If you prefer, you can dissolve four ounces of Prussian blue in a gallon of soft water. Immerse the yellow goods thoroughly and rub them until coloured to suit the taste.

Aniline Green for Straw.—Straw, in a manufactured condition, immortelles, grasses, etc., may be very easily coloured with aniline green, as follows: Place the articles in boiling water for ten to fifteen minutes, and allow the whole to cool; in the meantime, mix together ten quarts of water and 450 grains chloride of lime, and add 450 grains of crystallized carbonate of soda, and then immerse the straw half an hour in the clear liquid obtained by allowing it to settle.

Move about the articles thus bleached, in a bath of 450 grains of hydrochloric acid in ten quarts of water for from five to ten minutes, and colour the well rinsed straw by agitating it in a bath of a clear solution of aniline green, of about 100 degrees, in a wooden vessel.

To Colour Woollen Bright Red.—For five pounds of cloth take seven and a half ounces ground cochineal, ten ounces cream of tartar, and one large wine glass of muriate of tin; place the cochineal in three gallons of boiling rain water. After boiling five minutes, add the other ingredients; then throw the goods in and handle them for three quarters of an hour, to give them an even colour. Wash in clean water and dry.

To Colour Cotton Red.—If the cotton be first passed through a weak solution of acetate of alumina and then dried at a high temperature, afterward washed, next treated with a hot decoction of madder and again washed, it will be found to have received a fine red, which is fixed so as to resist the action of air, light and water.

To Colour Fabrics Madder Red.—To every eight pounds of woollen yarn or cloth take four pounds of madder, half a pound of alum, half a pound of cream of tartar. Soak the madder in warm water overnight. Dissolve the alum and cream tartar in soft water, boil five minutes and skim it. Wet the articles to be coloured in strong soap suds, and boil three hours in the alum and tartar water; wring out and air them.

Now put the articles in the madder; have it warm over a slow fire, keep stirring for three hours; during that time wring and air them two or three times and note the time required for airing, as they must be in the dye three full hours or the colour will fade; wash thoroughly in soap suds, then wring out the articles.

While airing and drying they should not be allowed to freeze. To save the madder after wringing out to air, shake the articles over a tub and return the chips to the dye. After colouring the above, the madder will colour old cloth very well. Use a brass kettle for dyeing.

Another Formula.—For two and a half pounds woollen yarn, take three-fourths of a pound of alum, one quart of bran and one pound of madder. Soak the madder over night in strong vinegar, enough to wet it. Never use any but the best cider vinegar. Dissolve the alum in sufficient water to cover the yarn, and boil the yarn in the solution for two hours; then take out the yarn and throw away the water.

Boil the bran with two gallons of water, and strain; add the liquor to the madder, put it in the kettle with soft water enough to cover the yarn, and bring the whole to a scalding heat; then put in the yarn, keep hot but do not let it boil nor simmer, for an hour, turning the yarn frequently. Then take out the yarn, and rinse immediately in cold water. The kettle used should be a bright brass or copper one, and the yarn, before colouring, must be perfectly clean.

To dye a Silk Shawl Crimson.—Take about one tablespoonful of cudbear, put it into a small pan, pour boiling water upon it, stir and let it stand a few minutes, then put in the silk, and then turn it over a short time, and when the colour is full enough take it out; but if it should require more violet or crimson, add one or two spoonfuls of purple archil to some warm water, and dry it within doors. To finish it, it must be pressed.

To dye woolens Crimson.—For crimson, put one-fourth of a pound of cudbear into a gallon or two of strong soap suds. Wash the goods in clean soap suds, put them without wringing into the dye, and keep hot in a brass kettle over the stove until the desired shade is obtained.

Cochineal Dye.—One ounce of cochineal, two ounces solution of tin, and one ounce cream of tartar; put in a clean brass kettle, with four quarts of pure rain water; let it simmer till all the ingredients are dissolved; then put in one pound of clean yarn; let it simmer half an hour, stirring continually, handling it in the air a few minutes; then wash in clean soap suds. It will not fade.

To dye Linens and Cottons Scarlet.—The cloth is first impregnated with oil, then with galls, and lastly with alum. It is then boiled for an hour in a decoction of madder, which is commonly mixed with a quantity of blood. After the cloth is dyed it is plunged into a soda lye, in order to brighten the colour. The red given by this process is very permanent, and when properly conducted it is exceedingly beautiful.

To dye Woollens Scarlet.—Wool may be dyed scarlet by first boiling it in a solution of muriosulphate of tin, then dyeing it pale yellow with oak bark, and afterwards crimson with cochineal, for scarlet is a compound colour, consisting of crimson mixed with a little yellow.

Second Method.—For one pound of cloth or yarn, mix in warm water half ounce cream of tartar and one ounce pulverized cochineal; add two ounces muriate of tin. Stir until it scalds, then put in the cloth or yarn.

Third Method.—Dip the cloth in a solution of alkaline or metallic salt, then in a cochineal dye, and let it remain some time, and it will come out permanently coloured.

Fourth Method.—Half a pound of madder, half an ounce cream tartar, one ounce of marine acid to a pound of cloth—put all together, and bring the dye to scalding heat. Put in your materials and they will be coloured in ten minutes. The dye must be only scalding hot. Rinse the goods in cold water as soon as they come from the dye.

To dye a Silk Shawl Scarlet.—First dissolve two ounces of white soap in boiling water, handle the shawl through this liquor, now and then rubbing such places with the hands as may appear dirty, till it is as clean as this water will make it. A second, or even a third liquor may be used, if required. The shawl must be rinsed out in warm water.

Then take one-half ounce of the best Spanish annotto and dissolve it in hot water; pour this solution into a pan of warm water, and handle the shawl through this for one-quarter of an hour; then take it out and rinse it in clean water, In the meanwhile dissolve a piece of alum of the size of a chestnut in warm water, and let the shawl remain in this half an hour; take it out and rinse it in clear water. Then boil one-fourth of an ounce of the best cochineal for twenty minutes, dip it out of the copper into a pan, and let the shawl remain in this from twenty minutes to half an hour, which will make it a full blood red.

Then take out the shawl, and add to the liquor in the pan one quart more of that out of the kettle, if there is as much remaining, and about one-half a small wineglassful of the solution of tin; when cold, rinse it slightly, put in pure, soft water.

To dye Cotton Brown.—One pound of catechu and four ounces of blue vitriol, dissolved in four gallons of water and strained. Have the goods wet when put in the dye. Keep in an hour, stirring constantly; take them out to air. Then dissolve four ounces of bichromate of potash in hot water enough to cover the goods. Dip until the colour suits. This will colour fifteen or twenty pounds of fabric. Do the colouring in brass or copper.

To dye Silks and Satins Brown.—Fill the kettle with river water; when it gently boils put in a quarter of a pound of chipped fustic, two ounces of madder and one ounce of sumac. These should boil at least from half an hour to two hours, that the ingredients may be well incorporated. The kettle must then be cooled down by pouring in cold water; the goods may then be put in, and simmered gently from half an hour to an hour. If this colour should appear to want darkening or saddening, a small piece of green copperas may be used; rinse in two or three waters, and hang up to dry.

To dye Stone Colour.—For a stone colour, to one pound of fabric use three tablespoonfuls of good green tea in sufficient soft water to immerse the cloth and boil thoroughly; strain and add a piece of copperas as large as a chestnut, then put in the goods and boil a short time.

To dye Slate Colour.—One paper of ink powder, one quart of vinegar, sufficient water to wet the articles well. Done in brass.

To dye Silk Lilac.—For every pound of silk take one and a half pounds of archil, mix it well with the liquor; make it boil a quarter of an hour, dip the silk quickly, then let it cool, and wash it in river water, and a fine violet or lilac, more or less full, will be obtained.

To dye Copper Colour.—If you want to colour some carpet rags a copper colour, take some last leached lye, put in four ounces of copperas for six quarts of lye immerse white rags, and boil twenty minutes; wash good and dry. This makes a pretty colour, and it wears well.

To dye Rose Colour.—One dram of rose aniline is dissolved in half a teacupful of alcohol to make the foundation for colour. Put this in half a pailful of warm, soft water. Wring the goods out of warm water and put into the dye for five minutes, lifting the fabric frequently. Let them dry before washing, and use but little soap. The colour is very brilliant, and is said to be permanent.

The strength of the dye is very quickly taken up, therefore it is best, when practicable, to put all the articles to be coloured in at once; when not practicable, save out some of the aniline to add before putting in the second quantity. Before putting the cloth into the dye, be sure all the aniline is dissolved. If any crystals are left undissolved, they will cause bright green spots on your goods wherever they touch.

To dye Purple.—Silk is first dyed crimson by means of cochineal, and then dipped into the indigo vat. Cotton and linen are first dyed blue, and then dipped in a decoction of logwood; but a more permanent colour is given by means of oxide of iron.

To colour Orange Colour.—Wool may be dyed orange by first colouring it scarlet and then putting it in a yellow bath.

To dye Silk Stockings Flesh Colour.—Wash the stockings perfectly clean in soap and water, then rinse them in hot water, put three tablespoonfuls of purple archil into a wash hand basin half full of hot water; put the stockings in this dye water, and when of the shade called half violet or lilac, take them from the dye water, and slightly rinse them in cold; when dry hang them up in a close box in which sulphur is burnt; when they are evenly bleached to the shade required of flesh colour, take them from the sulphuring box and finish them by rubbing the right side with a clean flannel. Satins and silks are done the same way.

To dye Olive Colour.—By combining red, yellow and blue, olive colour is produced. Cotten and linen receive an olive colour by being passed through a blue, yellow and then madder bath.

To Brighten Colours.—Soda in the rinsing water will clear up and intensify almost any blue or purple. Vinegar will do the same for pink or green calicoes. It is said that a strong decoction of common hay will preserve the colour of French linens and lawns.

To Set the Colour of Cotton Dresses.—Take a large, double handful of bran, put it in a saucepan and set it over the fire, allowing it to boil thoroughly in a quart of water; when thoroughly boiled, strain the bran and throw the water into that in which you are about washing your lawn or chintz dress. Let the dress soak for an hour or so in it before washing. Instead of starch, use a weak solution of glue water, and iron on the wrong side.

To dye Furs.—Take lye that will bear up an egg. To one gallon of lye add two quarts soft water; heat in an iron kettle. Take one ounce of acetate of lead, one ounce of sulphate of iron, seven ounces litharge; pulverize the ingredients and dissolve one at a time in the lye. When the fluid is blood warm, put in the furs a few moments only, then air them and dip into strong vinegar, then slick them off and hang them up to dry. Hides should always be well handled. The dye can be made stronger by adding more of the ingredients, and brushing on if not dark enough.

Variegated Cotton Thread or Yarn.—Cotton thread or yarn may be dyed in two or three colours by covering some parts with parchment paper, tightly wound, and thin tin or lead foil, holding the latter in place by binding threads. If tied sufficiently tight when the skeins are introduced into the dye bath, the protected parts remain white; and by protecting the dyed portion, and unwrapping the white portion, another colour may be applied.

Preserving the Colour of Dresses.—The colours of merinos, mousselaine delaines, chintez, printed lawns, etc., may be preserved by using water that is only milk warm; make a lather of white soap before you put in the dress instead of rubbing it on the material, and stirring into a first and second tub of water a large tablespoonful of ox gall. The gall can be obtained from the butcher, and a bottle of it should always be kept in every house.

No coloured articles should be allowed to remain long in the water. They must be washed fast and then rinsed through two cold waters, unless woollen then in warm water. Into each rinsing water stir a teaspoonful of vinegar, which will help to brighten the colours; and after rinsing hang them out immediately.

Indigo for all Fabrics.—Indigo has a very strong affinity for wool, silk, cotten and linen. Every kind of cloth, therefore, may be dyed with it without the assistance of any substance to set with whatever. The colour thus induced is very permanent.

Setting Colours.—Some mordants modify the colour; thus alum brightens madder, giving a light red, while sulphate of iron darkens it, giving a purple. It will be well to observe these facts when colouring.

FABRICS.

To Wash Flannels.—The principal reason that flannels do not look as nicely as expected after being washed may be attributed to the fact that they are not usually washed separately from the other clothes. They should never be put in the same water with linen and cotton goods, as they will not only gather all the lint and dirt in the water, but be injured in the brightness or liveliness of colour Always use warm suds, never hot, performing the labour as soon as possible, and do not apply soap directly to the flannel. Rinse in clear, warm water, never cold, and place where they will dry readily. Coloured and white flannels should not be washed together, and if in the same water, put through the white first. If flannels are put into dirty suds, the water is made cleaner thereby, but the fabric but little, if any, improved.

To Wash Merino.—The same method should be pursued as for flannels and all woollen and cotton goods. Boil the soap to make a lather, wash them in this warm, and rinse in a second lather (if white, mix a little blue). Never rinse in plain water, or use cold lather; and never rub the soap upon merino or flannel; the one shrinks, the other thickens and spoils the wool.

To Restore White Flannel.—To restore the original appearance to white flannel which has turned yellowish by lying for a long time or by wear, soak for an hour in a weak solution of bisulphate of soda, then add a little diluted muriatic acid, stir well and cover the vessel for twenty minutes. After this, take the flannel out, rinse in plenty of warm, soft water, and dry in the sun. The flannel will be purely white,or :—

Use one and a half pounds of white Marseilles soap in fifty pounds of soft river water, to which is added two-thirds of an ounce of spirits of sal ammonia, and the whole thoroughly mixed. The flannel is to be immersed in this solution and well stirred around, and afterward washed off in pure water. The same result may also, it is said, be obtained still more quickly by immersing the flannel for an hour in a dilute solution of acid sulphate of soda, and then stirring in dilute hydrochloric acid, in the proportion of one part of acid to fifty of water. The vessel is then to be covered over and allowed to remain for a quarter of an hour, when the articles are to be removed and thoroughly washed.

To Wash Coloured Fabrics.—Before washing any coloured fabrics soak them for some time in water, to every gallon of which is added a spoonful of ox gall. A tea cup of lye in a pail of water is said to improve the colour of black goods when it is necessary to wash them. A strong, clean tea of common hay will preserve the colour of French linens.

Vinegar in the rinsing water for pink or green will brighten those colours, and soda answers the same end for both purple and blue. Sugar of lead (remember this is very poisonous) is good for preserving the colour of blue. Put one ounce of the sugar of lead in a pail of cold water, and soak the fabric for two hours therein, and dry it before washing.

To Prevent Prints Fading.—Take the dress when it needs washing, and dip it in a pail of salt water, and dry it before sending it to the wash. This should be done before the dress is washed the first time, and the process need never be repeated, or :—

Put wheat bran in a bag, boil and take half the water to wash in, half to rinse in ; use no soap. This will cleanse them without fading, and stiffen them without starch. Iron on the wrong side and they will look as if just out of the shop, or :—

Make a lather by boiling soap and water together; let it stand until it is sufficiently cool for use, and previously to putting the dress into it, throw in a handful of salt; rinse the dress without wringing it in clear, cold water, into which a little salt has been thrown; remove it and rinse it in a fresh supply of clear water and salt. Then wring the dress in a cloth and hang it to dry immediately, spreading as open as possible, so as to prevent one part lying over another. Should there be any white in the pattern, mix a little blue in the water, or :—

The first requisite is plenty of water; this is even more essential for coloured than for white clothes. It should not be hot enough to scald and should have a moderate suds of hard soap before the garments are put in. Wash calicoes in two waters, using but little soap in the second. When clean, rinse them two or even three times in tepid water, Good laundresses always assert that the great secret of clear muslins is thorough rinsing.

The quality of starch used affects light colours, and for muslin dresses especially only starch of the purest quality should be used. When no very great stiffness is required, it is a good plan to stir the starch into the rinsing water; it assists in setting the colours where they show a tendency to run,or :—

Infuse three gills of salt in four quarts of boiling water, put the calicoes in while hot and leave them till cold: in this way the colours are rendered permanent, and will not fade by subsequent washing. So says a lady who has frequently made the experiment herself; "Nothing can be cheaper and more quickly done."

Making and Using Washing Fluid.—One pound of soda ash, one pound of unslaked lime, four quarts of water. Boil these ingredients together in a saucepan. As soon as boiled, pour off to settle. Soak the clothes overnight, with one-half cup of the solution thrown into the water. After rubbing the clothes, which will be very easy, put them into the boiler, which must contain soft water. Before putting them into the boiler, add one-half cup of the solution with a few slices of soap to dissolve. Let the clothes boil ten minutes; take out and rinse. This method will remove all stains, and beautiful white clothes will appear. It does not rot the goods. A lady has used this preparation for fourteen years. and could not be prevailed upon to use any other. She also mentions several of her friends who think it unequalled. It is not very expensive, for six pence will buy material for many washes, or :—

Put five quarts of rain water into a kettle, and, when it is hot, add one pound of sal soda and one-half pound of quicklime; let the whole boil together a few minutes until the sal soda and lime are dissolved, then remove it irom the fire, and when it is settled it may be put into bottles.

The night before washing, put the clothes soaking. In the morning wring them out and put them boiling, having added about a pint of the fluid to the boiling water, stirring it together. After they are boiled, it will be found necessary to rub the dirtiest of the clothes, but they come clean much easier from the effects of the fluid. A fluid made by dissolving saltpetre in soft water is an excellent aid in washing, and not considered by housewives generally as injurious,

To Remove Mildew from Clothes.—Mix soft soap with powdered starch, half as much salt, and the juice of a lemon; lay it on the part with a brush , then lay the article on the grass day and night till the stain comes out, or :—

Make a very weak solution of chloride of lime in water—about a heaping teaspoonful to a quart of water; strain it carefully, and dip the spot or the garment in it, and if the mildew does not disappear immediately, lay it in the sun for a few minutes, or dip it again in the lime water.

The work is effectually and speedily done, and I cannot find by experiment that the chloride of lime either rots the cloth or removes delicate colours, when sufficiently diluted, and the article rinsed afterwards in clear water. If the mildew is on lawn or muslin, wash in hot chlorine water. Spirits of hartshorn is also said to be useful for the same purpose, so is buttermilk and lemon juice.

How to Clean Merino.—Grate two or three large potatoes; add to them a pint of water; let them stand for a short time and pour off the liquor clear, when it will be fit for use. Lay the merino on a flat surface and apply the liquid with a clean sponge till the dirt is completely extracted. Dip each piece in a pailful of clean water and hang up to dry without wringing. Iron while damp on the wrong side. It will then appear almost new.

How to Wash Delaines.—Have the water only milk warm, making a lather of white soap before you put in the dress, instead of rubbing it on the material, and stirring into a first and second tub of water a large tablespoonful of ox gall. Wash fast and then rinse through two cold waters. Into each rinsing water stir a teaspoonful of vinegar, which will help to brighten the colours; and after rinsing hang them out immediately. When dry enough to iron (still a little damp) bring them in; have irons ready heated, and iron them at once, as it injures the colours to allow them to remain damp too long, or to sprinkle and roll them up in a covering for ironing next day. The best way is not to do coloured dresses on the day of the general wash, but to give them a morning by themselves. They should only be undertaken in clear bright weather.

If allowed to freeze the colours will be irreparably injured. No coloured article should ever be boiled or scalded at all. Some colours (especially pinks and light greens), though they may stand perfectly well in washing, will change as soon as a warm iron is applied to them; the pink turning purplish and the green bluish.

Washing Muslins.—Muslin dresses, even the most delicate colours, can be cleaned in a quarter of an hour, without losing their colour. Melt half a pound of white soap in a gallon of water, empty in a washing tub of water; place near two other large tubs of clean water, and stir into one a quart of bran.

Put the muslin in the suds, turn it over and knead it for a few minutes; squeeze it out well, but do not wring it, lest it get turned: rinse it about quickly in the bran for a couple of minutes. Rinse again well for a couple of minutes in clear water. Squeeze out dry, and hang it between two lines. A clear, dry day should be chosen.

SILK.—Half a pint of gin, four ounces of soft soap, and two ounces of honey, well shaken. Wet a sponge with this mixture and rub the silk, which should be spread upon a table. Then wash it through two waters, in which put two or three spoonfuls of ox gall, which will brighten the colours and prevent them running.

Do not wring the silk, but hang it up to dry, and while damp iron it. The lady who furnishes this recipe says she has washed a green silk dress by it, and it looks as good as new.

Cleaning Silk.—Rub each breadth carefully with a woollen cloth to get the dust from the surface, then mix an equal quantity of strong tea and vinegar, with which the silk is washed by rubbing it with a piece of flannel. It must be made very wet. Smooth the silk, carefully folding it, and in about fifteen minutes iron it on the wrong side with very hot irons. This applies only to black silk, black ribbons, cravats, etc., or:—

Black silks can be renewed by sponging with alcohol, and afterward with a little potato water, and winding them around a roller without ironing. The method of preparing the potato water is this: Pare and slice a good sized potato, and pour about a pint of warm water upon it; let it stand in a warm (not hot) place for half an hour, and it will be fit for use. Crape veils are renewed by winding them on a board and steaming over boiling potatoes.

To Remove Grease From Silk.—Put French chalk upon the wrong side, allow it to remain twenty-four hours; then split a common business card, lay the rough side next to the powder, and pass a warm flat-iron over it, or:—

Fuller's earth, perfectly dried (so that it may crumble into a powder), is to be moistened, with the clear juice of lemons, and a small quantity of pure pearl ashes or saleratus is to be added. Knead the whole carefully together, till it acquires the consistence of a thick, elastic paste; form it into convenient small balls and dry them in the sun.

To use, first moisten the spot on the clothes with water, then rub it with the ball, and let the spot dry in the sun after having washed it with pure water, the spot will entirely disappear.

A lady writes: "I have cleaned wheel grease from a nice silk thus: Laying the silk on a clean sheet folded to eight thicknesses, I rubbed the greased part with a soft cloth dipped in lard, moving the silk to a new spot frequently. "After a time the wheel grease all went through, leaving only clean lard. This was then cleaned out in the same way, by rubbing it with some nice soap and alcohol, using a clean cloth to rub with, and frequently changing to a new spot on the underlying sheet. The silk was then laid on a clean cloth, and rubbed dry with a soft cloth, A friend cleaned white Canton crape in this way; and you cannot find a place where it was greased."

Wrappings For Silk.—Silk articles should not be kept folded in white paper, as the chloride of lime used in bleaching the paper will probably impair the colour of the silk. Brown or blue paper is better; the yellowish, smooth Indian paper is best of all. Silk intended for dress should not be kept long in the house before it is made up, as lying in the folds will have a tendency to impair its durability by causing it to cut or split. If it must be kept, change now and then the position of the folds.

To TAKE CREASES OUT OF SILK.—Hard silk should never be wrinkled, because the thread is easily broken in the crease, and it never can be rectified. The way to take the wrinkles out of silk scarfs or handkerchiefs is to moisten the surface evenly with a sponge and some weak glue, and then pin the silk with toilet pins around the selvedges on a mattress or a feather bed, taking pains to draw out the silk as tight as possible.

When dry, the wrinkles have disappeared. The reason of this is obvious to every person. It is a nice job to dress light coloured silk, and few should try it. Some silk articles may be moistened with weak glue or gum arabic water, and wrinkles ironed out on the wrong side by a hot flat-iron.

Waterproof Cloth.—In a bucket of soft water put half a pound of sugar of lead and half a pound of powdered alum; stir this at intervals until it becomes clear, then pour it off into another bucket, and put the garment therein, and let it be in for twenty-four hours, and then hang it up to dry without wringing it. The rain hangs upon the cloth in globules, but will not penetrate it at all, or :—

Take one-fourth ounce of yellow soap; boil twenty minutes in one gallon rain water; skim, and when cold, put it in the cloth; let it soak for twenty-four hours; take it out and hang up to drain, and when it is half dry, put it into a solution of half a pound of alum, quarter pound sugar of lead, dissolved in four gallons of rain water.

When the cloth has been thoroughly soaked, hang it up to dry. This will not alter the appearance of the cloth, and will resist many hours of rain. Still another way is to coat the cloth with linseed oil, to which a little wax and litharge have been added, and it will become waterproof.

Sizing for Cloth.—Dissolve a little India rubber in boiling oil or turpentine, and add a little of this to thin paste while both are hot. This is the best size for cloth.

To Raise the Nap on Cloth.—Soak in cold water for half an hour, then put on a board, and rub the threadbare parts with a worn hatter's card, filled with flocks, or with a prickly thistle until a nap is raised. Hang up to dry, and with a hard brush lay the nap the right way.

How to Brush Gentlemens' Clothes.—Have a wooden horse to put the clothes on, and a small cane to beat the dust out of them; also a board or table long enough for them to be put their whole length when brushing them. Have two brushes, one a hard bristle, the other a soft; use the hardest for great coats, and for the others when spotted with dirt.

Fine cloth coats should never be brushed with too hard a brush, as this will take off the nap and make them look bare in a little time. Be careful in the choice of the cane; do not have it too large, and be particular not to hit too hard. Be careful also not to hit the buttons, for it will scratch, if not break them; therefore a small hand whip is the best to beat with.

If a coat be wet or spotted with dirt, let it be quite dry before brushing it; then rub out the spots with the hands, taking care not to rumple it in so doing. If it wants beating do it as before directed, then put the coat at its full length on a board; let the colour be toward the left hand and the brush in the right.

Brush the back of the collar first, between the two shoulders next, and then the sleeves, etc., observing to brush the cloth the same way that the nap goes, which is toward the skirt of the coat. When both sides are properly done fold them together; then brush the inside, and last of all the collar.

TO DRY-CLEAN CLOTH—Dip a brush in warm gall and apply it to greasy places, rinse it off in cold water; dry by the fire, then lay the coat flat, strew damp sand into the cloth; then brush it out with a hard brush, and the sand will bring away the dirt. Rub a drop of oil of olives over with a soft brush to brighten the colours.

HOW TO CLEAN A COAT COLLAR.—Obtain from drug store some soap-tree bark. Break a piece about two inches square into small bits, and pour over it half a pint of boiling water; let it stand an hour or two, then sponge the collar well with the liquor; a second sponging with clear water will clean it nicely. Both washing and rinsing water should be warm as for flannel.

TO CLEAN MEN'S OLD CLOTHES.—Whip and brush thoroughly. Remove grease spots with ammonia, and with alcohol and water, equal parts, diminish the gloss of hard goods. Dealers in old clothes give the garments a new appearance by use of tobacco. They put two ounces of common tobacco boiled in half a gallon of water. In the hot decoction they dip a stiff brush, and rub the clothes thoroughly in all directions, no matter what colour of cloth. When the liquid is well penetrated, they rub in one direction thoroughly, and suspend the cloth to dry; by this treatment it becomes clean and lustrous, and, singulary, no tobacco smell will remain.

TO RENOVATE AN OLD COAT.—First clean the coat of dirt and grease, then take one gallon of a strong decoction of logwood, made by boiling logwood chips in water. Strain this liquid, and when cool add two ounces of gum arabic in powder, which should be kept in well stoppered bottles for use. Then go gently over the coat with a sponge wet in the above liquid, diluted to suit the colour, and hang it in the shade to dry. After which, brush the nap smooth, and it will look as good as new. The liquid will suit all brown or dark colours if properly diluted of which it is easy to judge.

To Revive Faded Black Cloth.—Having cleaned it well, boil two or three ounces of logwood for half an hour, dip it in warm water and squeeze it dry, then put it into the copper kettle, and boil half an hour. Take it out and add a small piece of green coperas, and boil it another half hour. Hang it in the air for an hour or two, then rinse it in two or three cold waters, dry it and let it be regularly brushed with a soft brush over which one or two drops of oil olives have been rubbed, or :—

Boil two or three ounces of logwood in vinegar, and when the colour is extracted, drop in a piece of carbonate of iron as large as a chestnut; let it boil. Have the coat or pantaloons well sponged with soap and hot water, lay them on a table and brush the nap down with a sponge. Then take the dye upon the table and sponge them all over with it, taking care to keep them smooth and brush downward. When completely wet with dye, dissolve a teaspoonful of saleratus in warm water, and sponge it all over with this, and it sets the colour so completely that nothing rubs off. They must not be wrung or wrinkled, but carefully hung up to drain. The brownest cloth may be made a perfect black in this simple manner.

To Repair Men's Clothes.—If elbows and knees of coats and pants are stretched into a swelling shape after all sewing is done lay a damp cloth upon them, fold them up, and let them remain thus an hour. Then lay them on a table; smooth them with the palm of the hand; pull them gently, all ways. Continue this till the swelling is reduced—elbows and knees straight and flat. Then press the garments on the wrong side finishing those places first, If a black article of clothing gets rusty, dilute a little ink with warm water, and sponge it well with this—for seams and edges use a pen; button holes often need this treatment. If the shoulders look quite gray take the ink undiluted, and be sure to rub it in well and then press it.

HOW TO MAKE A SHIRT.—Take an old shirt that is a good fit, rip it to pieces, and cut out the new one by it, baste it together and try it on. After you have got it to fit nicely, unbaste it and cut out a pattern, allowing for the seams and marking all the hems, gathers, etc., by notches, so it will be just right to cut your cloth by.

But few ladies are compelled now to make bosoms, as they can be bought for a trifle more than the linen would cost. Putting the bosom into the shirt is the first thing to be done after it is cut. Double the front of the shirt in the middle, also double the bosom and lay it upon the shirt exactly square and even all around, then cut out a piece one inch wider than the bosom and half an inch shorter.

Unfold shirt and bosom, commence at the top of each side and sew the bosom in place of the piece you cut out. Then lay a plait at the bottom and upon each side, both plaits of a size and large enough to make the bosom set smooth; stitch the bottom across, turn the bosom under and hem it down, it being half an inch too long, having been left so for that special purpose, and saves sewing a tape across as some do.

The object of making a plait in the shirt at the bottom of the bosom is to make the front of the shirt narrow. The back you will at once see needs to be wider than the front, to give freedom to the arms and shoulders; if both sides are of a width the bosom will shrug together and set out beyond the vest in a manner you may have seen, but could not explain.

Line the front of the shirt the whole length and width from the bosom back to the arm size. Some only face a narrow strip just around the arm size, but the best way by far is to line the whole back from the neck down to the bottom of the arm size and the front as before said.

The quickest and easiest way to sew up seams in shirts and all other undergarments is in this wise: Sew up your garment or sleeve upon the right or outside, trim the seam very small, turn and sew up again on the wrong side, and your seam is quickly and neatly finished without felling, which is a branch of sewing most ladies dislike very much to do. The first time sewing the seam, the stitches may be long, if the cotton is strong, but the second time it must be done tight and well, and you will find the seam strong and soft.

To Do Up Shirt Bosoms.—Take two ounces of white gum arabic, put in a pitcher and pour on a pint or more of boiling water, according to the degree of strength you desire, and then, having covered it, let it stand all night. In the morning pour it carefully from the dregs into a clean bottle, cork and keep it for use.

A tablespoonful of gum water should be stirred in a pint of starch made in the usual manner. This will also give to lawns, either white or printed, a look of newness when nothing else can restore them after they have been washed, or :—

Take half an ounce each of white wax, isinglass and gum arabic, and half a teaspoonful of alcohol, and put them into a gill of boiling water, and after a good shaking, bottle. To a quart of starch add a teaspoonful of the mixture. Starch the linen while wet.

To Make Fabrics Fire-proof.—By using a strong solution of alum for rinsing water it will positively make cottons fire-proof. Mothers who "sit on thorns" at school concerts and exhibitions, watching the dangerous proximity of gossamer dresses to the foot lights, will appreciate this advantage. And so far from injuring the looks of the muslin, there is no other treatment that will so brighten and improve the colours.

How to Iron Clothes.—One who knows by practical experience of what she speaks, says: That the ironing board should have a slip cover, and the same be washed each fortnight, and besides there should be a large piece of thin cotton to lay over starched things to take the first pressure of the iron. This piece must be fine, for coarse cloth will leave the impress of its thread on nice fabrics.

A bowl of clear water, with a clean sponge or soft brush, or worn white rag, must be ready for dampening spots that have dried since folding, or have not dried smoothly. The table ought to be solid, without leaves, and a high chair should be provided, so that one may sit close to the board, touching it with the waist.

It is just as convenient to iron sitting as standing, if one gets used to it, and most of the fatigue of ironing comes from standing long at a time. A housekeeper who knows how to be good to herself—as every woman ought to be—will have a table for ironing with one side hollowed out, like the cutting boards which seamstresses use in their laps.

To Iron Velvet Ribbon.—Dampen the under side slightly, and draw it backward and forward over a hot stove pipe until the velvet is quite dry. A still better plan—though in winter it is not always as convenient—is to lay a wet piece of cotton cloth on a hot flat-iron placed upside down, and while the steam is rising from it, to draw the under side of the velvet tightly backward and forward over the wet cloth.

To Raise the Nap of Velvet.—Place a dampened towel over the face of a moderately hot flat-iron. Lay the piece of velvet on this immediately, and while the steam is passing through, brush briskly in the direction that will raise the nap; a nail brush will answer the purpose. I have found this method the most effectual of various ones tried.

To Wash Lace.—Wind a large bottle with white flannel, baste on the lace, taking care not to draw it out of shape, and cover with more flannel. Prepare a fine suds, and cleanse the lace by passing swiftly through the water and by squeezing and patting it. Change the water once or twice, then remove the outside flannel and rinse. If starch is used it should be very thin.

To iron, lay the lace upon several thicknesses of flannel, cover with flannel, and press with a warm iron on the wrong side, *lightly*. If the lace is kept in a box with a little magnesia sprinkled over, it will retain its whiteness for a long time. The magnesia is also good for removing oily substances that may accumulate upon collars from the hair.

To Smooth Ribbon.—Place a moderately hot flatiron on the ironing board, the ribbon under the iron, and pull it carefully through. If the ribbon is not pulled too fast, and the iron is the right warmth, this will be found to be a much better way than simply rubbing the iron over the ribbon.

To Clean Black Ribbons.—Take an old black kid glove, no matter how old, and boil it in a pint of water for a short time; then let it cool until the leather can be taken in the hand without burning; use the glove wet with the water to sponge off the ribbon.

If the ribbon is very dirty, dip it into the water and draw it through the fingers a few times before sponging with the glove. After cleaning, lay a piece of paper over the ribbon and iron; paper is better than cloth. The ribbon will look like new.

To Wash Ribbons.—If dingy and greasy, rub the yolk of an egg upon them, or French chalk upon the wrong side, and let it dry; then lay it upon a clean cloth, and wash upon each side with a sponge, and press upon the wrong side. If very much soiled, use bran water, and add to the rinsing water a little muriate of tin to set red; oil of vitriol for green, blue, maroon and bright yellow.

To Renew Silk or Ribbons.—Scrape several large potatoes and put a pint of cold water over them. When settled, pour it off; spread your silk upon the table and wet with a sponge a small part of the silk, and iron with a flat just a little warmer than you can handle with your hands bare. If it is too hot it will injure the silk.

To stiffen ribbons or old silk, take a lump of gum arabic about as large as a hickory nut; dissolve it in a half pint of water and dip the silks or ribbons in it, and iron them immediately. If they are soiled they should be washed and dipped in a weak solution of alum water.

To Clean Gold and Silver Lace.—Gold and silver lace may be cleaned by sewing it in clean linen cloth, boiling it in a pint of soft water and two ounces of soap and washing it in cold water. If it be tarnished, apply a little warm alcohol to the tarnished parts.

To Starch Black Calico.—Make a strong tea of fig leaves, and mix the starch with this. Wash the print in three waters and rinse in the fig leaf water. When nearly dry fold the fabric, let it remain so for thirty minutes, and then iron.

How to Wash Tatting.—Get a common stone bottle (a quart porter bottle will do) and sew a piece of thin flannel evenly all over it; wrap the tatting on, carefully tacking each row as flatly as possible to the flannel.

Sew a piece of tarlatan or very thin muslin over it, leaving the tarlatan long enough to tie firmly, both at the bottom and top of the bottle. Sink the bottle in a large basin of cold water and soak it overnight.

Cut up a piece of white soap, put it in a large stew pan of water with the bottle, and stew for six hours; if the tatting does not look quite clean, rub the bottle a little with the hand and more soap, and stew it again; rinse well in clear, cold water, and put the bottle in the sun or near the fire to dry. when the tatting can be taken off. If it has been tacked on well, and in its proper form, it will be just like new tatting.

How to do up Laces.—When one has any fine handkerchiefs, embroidery, or laces, to do up, it is a good way to put them in a broad earthen basin, in fair, soft water; let them remain three days, then put them in a stone jar, in cold, soft water, rubbing with Castile soap any spots there may be upon them, and setting the jar on the back part of the stove, let the water come slowly to a boil. Then remove and rinse in fair, cold water, in which is the least suspicion of blueing.

Make a thin starch and boil until perfectly clear; a trifle of spermaceti or white beeswax adds a polish. Into this is dipped each article separately, which is then dried sufficiently to iron, being alternately clapped between the hands and spread out to the warm rays of the sun in summer, or before the blaze of a clear fire—wood is best—in winter.

Have ready a clean, dry towel, and, as soon as each article is dry enough to iron, lay it in this towel and give it a tight roll. Lay it on baby flannel to iron and have the flat heated as hot as possible without danger of scorching. The heat of the iron should always be tried upon a piece of waste cloth kept for the purpose. In using the iron, the touch should be firm and quick.

A fine linen rag, wet with cold water, should be at hand to rub any article that may have become too dry. Laces require very little starch A lump or two of white sugar dissolved in a coffee cupful of water will impart all the stiffness they need. Where it is considered desirable to retain the slightly yellow shade of real lace, add a teaspoonful of coffee to the sugar and water.

To Wash Bombazine.—Put a teaspoonful of ox gall to a gallon of suds. Put the clothes through by hand pressure; no rubbing. Rinse in lukewarm water in which a little gum arabic has been dissolved and thoroughly incorporated. Do not wring, but squeeze out the water, and when dry enough press gently with a warm iron upon the wrong side.

To Wash Fine Fabrics.—Laces and fine things should be washed in hot soft water. Well soap them and squeeze and shake out, but on no account rub them Repeat the squeezing and shaking out till they are clean. Rinse them in some more clean hot water, and well soap them again, and put them into a saucepan with enough hot water to cover them.

Soft water is best, but if that cannot be procured, add a piece of soda—say a quarter of an ounce to half a gallon of water, according to the hardness of the water. Boil for half an hour; then wash them out again, and rinse in cold blue water. Hang them on a clothes horse till dry, when they can be starched. Lastly, roll them up in a dry cloth for two hours, by which time they will be fit to iron.

FILTERS.

A Water Filter.—In country places and isolated houses drinking water is often taken out of ponds and ditches. When boiled it may be harmless, but it is often used without having been boiled. Filtering does not purify water by destroying germs, but it abstracts a large part of the suspended matter of a more tangible character, some of which may be injurious. It is not difficult or costly to make a fairly satisfactory filter for such houses. Take an oak cask or barrel that is sound, sweet and clean; bore an inch hole near the bottom of one side, in which insert the end of a piece of three-quarter inch lead pipe (from inside), ten or twelve inches long, the other end projecting inward and bent upward towards the middle of the cask. In the lower end place a common beer faucet or stop cock, from which to draw water as desired.

Have ready say one bushel of good hard wood charcoal, and the same quantity of clean, fine gravel—not limestone—from the fineness of coarse sand, up to the size of peas, and if not clean, wash it till no dirt will appear in the water.

Break the charcoal to the size of walnuts and smaller, then mix it evenly with the gravel. Cover the bottom of the cask three or four inches thick with this mixture, pounding it down firmly. Next take a clean tin vessel, the shape of a garden flower-pot, of large size (say two gallons), and place it bottom upwards in the centre of the barrel, on top of the layer of gravel and coal, and over the end of the lead pipe.

Then take a piece of small sized one-quarter or three-eighth inch lead or wood pipe, and place one end firmly into a hole in the bottom of the vessel, and bring the other end through a hole bored near the top of the barrel, for the purpose of admitting air into the space under the pail. Now fill in the space around and above the tin vessel with the mixture of coal and gravel, pounding it firmly down as you proceed, till the cask is about three-fourths full; then place some thin flat stones (not *limestones*) on top, and the filter is complete.

The water being poured in on top, passes through the gravel and charcoal, by which it is purified, and enters the chamber from which it is drawn by the faucet, as required, the small pipe admitting air into the chamber to supply the place of the water while it is being drawn out.

This filter is only designed for rain or soft water, and will serve for constant use a year or more without renewal: but if used for hard water, the charcoal soon loses its virtue. When first put up, the water drawn from the filter will have an alkaline taste, but that disappears after the filter has been in operation a day or two.

Poor Man's Filter.—Take a common garden flower-pot, of some nine inches diameter and ten inches depth. The drainage hole is stopped (not too tightly) with a piece of clean sponge. A layer of about two inches of charcoal is first placed in the pot; then a second layer of clean sand, upon which a layer of three inches of clean, coarse gravel is placed. The pot can be set over an earthen jar, into which an abundance of pure drinking water will filter for all drinking purposes, or:—

Place on a slat bottom in a clean pail, not painted inside, and having a hole in the bottom, a piece of flannel, and on this some coarsely powdered charcoal, then coarse river sand, and cover the whole with sandstone broken into small pieces. The pail should rest upon a little platform, projecting enough to clear the hole for water escape from the platform, and keep a one or two gallon jar beneath it. In summer, by keeping a piece of ice in the crock or jar, a refreshing drink is ever ready.

Paper Filter.—A very cheap and quickly constructed filter for liquid, remedies, etc., may be made by taking a square piece of blotting paper and folding it both ways, corner to corner through the centre. By thus folding it is made cupping when opened, and will sink into the mouth of a small vessel sufficiently to contain an ounce or so of the substance to be filtered. It is better, however, to use it in a funnel.

Regular filter paper can be purchased at almost any chemist's shop, very cheap. This comes usually in round sheets, but for use it should be cross-folded the same as the square. If these paper filters were used more, there would not be so many ill effects from poisonous sediments in medicines.

To Filter Wine.—In some cases where the wine is only a little thick from mechanically suspended substance, it can be made quite clear by filtering through a wad of white cotton put in the funnel; and when this answers, it is much quicker than the paper filter.

Filter for Oil and Jelly.—For jelly and oil, wool alone is the proper medium for filtering. The felted wool jelly bag is pretty well known as the best means of clearing calves' foot jelly, and it also answers for olive and other oil. These bags are, however, too expensive to be generally used; hence they are rarely seen in kitchens.

A good substitute for the wool bag is a colander, on the inside of which a new flannel lining should be fitted, made of double stuff. A wad of white knitting wool, thoroughly cleansed, put in the neck of a funnel, will do to filter any small portion of such fluids.

FIREWOOD.

In most large towns split firewood is purchased. In the country and upon farms the stacks of faggots accumulate in abundance. We shall therefore not treat this subject at any great length, but merely observe that great loss is sustained by using green wood for fuel. Green wood loses say one third of its weight when dry, and the water that represents this weight must be driven off before the wood can be burnt. Suppose you try to burn 100 cubic feet of green wood, you lose enough heat to turn about 200 gallons of water into steam, or enough to raise 1,000 gallons of water to boiling point. Let the wood be thoroughly dry then, not only because of the trouble and annoyance but because of the loss of heat.

FURNITURE.

Every lady is endowed with something of a mechanical gift, and no one is so entirely devoid of it, but what by the exercise and development of that which is possessed, very material comfort may be added to home life. I do not suggest that the coarser parts of mechanical work be attempted, but that the genius possessed be exercised to the enhancement of beauty and domestic enjoyment. By many, the important principles in the mechanical construction of different things in use are overlooked, and these faults are manifested in the household, and though seemingly small, are nevertheless of great importance, inasmuch as they are woven into the very web of domestic life, and have an effect upon the habits and characters of the younger members of the family which will not be easily eradicated.

Whatever is closely associated with every day life has a marked, and I may say, a wonderful influence upon the mind. A looseness of habits has an immoral effect, while order, neatness and perfectness in all advocations soften and refine the feeling, elevate the mind and cultivate a taste for perfect work in all things.

In very many houses may be found articles of furniture that have stood for years looking dingy and rough. They have been and are now allowed to remain in that unsightly condition, because the good housewife does not know that it is in her power to beautify them, and the husbandman avers that he has other things, and those of more importance, to attend to. A housekeeper is naturally just as proud of the appearance of her rooms as a man of his horse and carriage, and she would gladly fix them up, or have the work done by some member of the household, if the *modus operandi* were understood. Where people are wealthy, they can send their damaged articles away for renewing, but those in moderate or cramped circumstances shrink from the expense.

To make a home pleasant and attractive, a great outlay of money is not necessary. I have seen many a country house made more inviting by the deft fingers of the lady occupants, than many city parlours and drawing rooms, where many pounds have been spent in dark, heavy articles, to be enveloped in the shadowy gloom of a badly lighted room. Gold would be no more valuable than brass if it were as plentiful; and so many of the expensive articles of ornamentation have their value in scarcity, rather than in absolute beauty.

There are a great many articles that may be made at home, costing little, yet convenient and beautiful; there is daily something getting out of repair which the owner should know how to fix and make as good as before, for in this there is a saving of money as well as a consolation of being master of the situation.

Varnishes for Furniture.—Many who have attempted the use of varnish failed to do a good job, and do not try again; they doubtless did not half prepare the article for the dressing and used a cheap varnish. Varnishes are composed of different gums and resins, which are generally soluble in alcohol. Many of them are made by dissolving the materials in alcohol, so as to liquify them, and then when they are applied the alcohol evaporates, leaving the gum or resin in a thin even coating over the surface.

If now any alcoholic substance comes upon such a surface, whether it be alcohol itself, as used for lamps, or spirits of any kind, or even wine, which contains but a small percentage of alcohol, a portion of it is dissolved, and the brilliancy of the surface destroyed. None but the very best turpentine varnish should be used, and before this is spread, wash the wood in saleratus water, and wipe dry with a cloth dampened with alcohol.

The varnish should be thinned with spirits of turpentine until it will flow easily, and spread in a clean, warm room, but not near a hot stove, for strong heat will cause the varnish to blister. Use a thin, flat brush; do not try to get on to much of the varnish; spread evenly and work rapidly, finishing as you go along; never attempt to improve the surface half a minute after you have gone over it.

Alcohol will destroy the beauty of the varnish on furniture, and may be used to good advantage when wishing to remove an old coat for the purpose of putting on a new. Fine sharp emery or sand paper may be used with good effect.

To Remove Spots from Furniture.—To remove ink from furniture, wipe the spots with oxalic acid; let it stand a few minutes and then rub well with a cloth wet with warm water. To restore paint and mahogany, wash with hartshorn water. Carpets are also improved by putting hartshorn in the water when mopping them. To remove white spots from tables or other furniture, rub the part with camphor, and they will dissappear. Where a whitish mark has been left on a table, by carelessly setting on a pitcher of boiling water or a hot dish, pour some lamp oil on the spot and rub it hard with a soft cloth. Then pour on a little spirits of wine or cologne water, and rub dry with another cloth. The white mark will disappear, and the table look as well as ever.

Before dust or spots of mud are removed from any varnished surface, they should be rendered soft with water, so that the grit will not scratch the polished surface. Oil will not attack either marble or varnished surfaces, and will do no injury except to naked wood or other porous substances which admit them into the pores, from which they cannot afterward be easily expelled.

Where crimson upholstery has been worn threadbare and a light spot appears, take a steel pen and crimson ink and touch up the spot. If the cloth is black, use black ink; if blue, use indigo, etc. In this way unsightly spots may be made to disappear.

To Take Out Bruises.—Wet the parts with warm water; double a piece of brown paper five or six times, soak it in the warm water and lay it on the place; apply on that a warm, but not hot, flat-iron till the moisture is evaporated. If the bruises are not gone, repeat the process. After two applications the dent or bruise will be raised to the surface. If the bruise be small, merely soak it with warm water and hold a red hot iron near the surface, keeping the surface continually wet; the bruise will soon disappear.

To Stain Furniture.—A stain which is said to be good, but one I have never tried, is made by mixing with one pint of linseed oil one and one-half ounces of alkanet root and a little of rose pink. This is a stain of a very pretty reddish hue, and should only be applied to such articles as are to be stained. A little Venetian red in linseed oil makes a good cherry colour. Sienna earth in oil makes a fine oak colour; Venetian red and a very little lamp-black in oil makes a good mahogany stain. For dressing up mahogany, mix Indian red with copal varnish till the right colour is secured; thin with benzine, and add a little boiled linseed oil if it dries faster than is desirable. For black walnut colour, mix with same pigments in such proportions as are necessary; or take asphaltum, pulverize it, place it in a jar or bottle, pour over it about twice its bulk of turpentine or benzole, put it in a warm place and shake it from time to time. When dissolved, strain it and apply it to the wood with a cloth or stiff brush. If it should make too dark a stain, thin it with turpentine or benzole. This will dry in a few hours. If it is desired to bring out the grain still more, apply a mixture of boiled oil and turpentine; this is better than oil alone. Put no oil with the asphaltum mixture, as it will dry very slowly.

The following makes a good polish: Shellac varnish of the usual consistency, two parts; boiled oil, one part. Shake it well before using. Apply it to the wood by putting a few drops on a cloth and rubbing briskly on the wood for a few moments. This polish works well on old varnished furniture. Another for redressing is made of cold drawn linseed oil, one quart; gin or spirits of wine, half a pint; butter of antimony, two ounces; spirits of turpentine, half a pint. This mixture requires to be well shaken before it is used. A little of it is then poured upon a rubber, which must be well applied to the surface of the furniture; several applications will be necessary for new furniture, or for such as has previously been French polished or rubbed with beeswax. Still another is made by mixing a pint of linseed oil, one-half pound of molasses, and a wineglass of gin. Stir it well and put it on lightly with a linen rag, rubbing it till dry.

Furniture Filling.—Scrape four ounces of beeswax into a basin, and add as much oil of turpentine as will moisten it through. Now powder one-fourth ounce of resin, and add as much Indian red as will bring it to a deep mahogany colour. When the composition is properly stirred up, it will prove an excellent filling for blemishes in mahogany and other dark furniture.

Mending Furniture.—In almost every house may be found bureaus, frames, stands etc., where the veneering is cracked off, and but little time or expense is necessary to repair it. Where pieces are split off or out, the same should be glued in place by use of the clamp. Fit the surface of a soft wood clamp-block to conform to the surface of the piece to be glued in, so that pressure will be all alike. Heat the block hot, then put a thin coating of hot glue on the piece, place it with precision, put on the block, and clamp down firmly by use of the wedges. Let the article stand twenty-four hours before taking off the clamp.

If the break is upon the leg of a chair, or other part where severe strain comes, the use of screws may be necessary to make the repair durable. In such a case, put the piece broken off in a clamp, so as to prevent splitting, then bore gimlet holes as required, and countersink for the heads. Next, place the piece where it belongs, clamp to the main part, and bore into the other portion far enough to enable the screw to work its way; separate, apply glue, first having warmed the piece broken off, then clamp firmly and drive the screws home.

It is better, generally, if the wood is hard, to drive the screws before glueing, to see that they can be forced clear in. It is not a pleasant thing to be balked after getting everything, as it is supposed, all ready. The screws should be sunk below the surface of the article mended. Touch hot glue to the heads, then press in putty firmly, smooth off with a glazier's or table knife, and stain the putty to conform to the colour of furniture repaired. Do not try to patch things up with gum or any of the prepared materials, for they will never give satisfaction, especially where strength is required in the mended parts.

When to Repair Furniture.—Chairs, tables, lounges, etc., are continually getting out of order in every house, and the time to repair them is when the break is first noticed. If neglected, the matter grows still worse, the pieces split off, get lost, and finally results in the laying by of the article of furniture as worthless.

Furniture Oil.—Take linseed oil, put it into a glazed crock with as much alkanet root as it will cover. Let it boil gently and it will become of a strung red colour; when cool it will be fit for use on suitable furniture.

Water on Furniture.—Water affects no substance except such as have open pores exposed, in which case it enters and causes the substance to swell, or such as are soluble in water, as glue in joints and mucilage or gum arabic, used sometimes for attaching superficial ornaments to fancy work. The practical lesson to be learned from this is, that housekeepers must take care in dealing with furniture, to keep water away from everything soluble in water, oil from everything porous, alcohol from varnish, and acids from marble.

To Clean Upholstered Furniture.—Occasionally upholstered work should be beaten with a flexible stick, then thoroughly brushed. It cannot be kept lively and clean by the use of the brush alone.

Wiping off Furniture.—After the application of a moist cloth to furniture, dry it by a brisk rubbing with chamois skin; this will leave a brightness that cannot be obtained by use of a cloth.

Renewing a Rocking Chair.—An old family rocking chair may be made very comfortable, and changed from an unsightly article by a little effort. Make a cushion for the seat out of such soft material as can be spared, then cover the back by a prepared padding or old comfortable, then cover the whole chair with cheap material, all one colour, or flowered chintz. As the old style of chairs are the most comfortable possessed, it will pay to keep them in service as long as possible. If you send the chair away to have new rockers put on, give instructions to have the new made after the original pattern of the old, so that the favourite article will not appear like a stranger on its return.

Home-made Washstand.—Select a box—a common dry goods packing box is best—about two and a half by two feet square and twenty-eight inches high. The side coming front should be open, and by means of a couple of cleats inside, a shelf put in dividing the space into two parts. Before going any further, put a common chair caster under each corner. Now put on a back eight or ten inches wide by nailing a board to the wall side of the box. The whole thing is now ready to drape.

Cover the top and back board with white or marbled oil cloth tacked on smoothly. "For the drapery and trimming," says a lady writer, "take first of blue or pink cambric, gather it a little and tack it round the top of stand, for the ground work of valance; if this be left with two openings about eighteen inches apart in front, it is best; then over this put any light material, dotted or plain, gathered or plaited. Make double box-plaited trimming of same (or similar) goods, and button at top and repeat at bottom, or leave with a plain hem (which I think is better); put also a section of the trimming on the edges where they come together in front. Place here also a bow of ribbon."

Mirror for Washstand.—"A mirror may be placed above the shelf and trimmed in same style, and rosettes of ribbon, or a splasher may be substituted, made of linen worked with red or blue embroidery cotton (it will wash and not fade) on an aquarian design, say one with a large swan, cat-tails, water lilies, cypress, ferns, and water-grasses.

Cheap Mantlepiece.—"A pretty mantle can be made of pine wood painted black, the lambrequin or drapery fastened to the edge with brass headed nails. Make your drapery of any plain dark cloth, have it straight and not more than five inches deep. Baste on one or more rows of velvet ribbon an inch and an half broad, and cover this with a network of coarse sewing silk in long stitches, using bright colours. Finish it with a fringe. If you cannot buy fringe, make it, and this is a good way:

"Cut the material for your drapery deep enough for fringe and all, say nine inches; then with sharp scissors cut the lower edge into strips four inches deep, and a quarter of an inch wide; prepare two more strips four inches deep in the same way; have them of contrasting colours; for instance, if your drapery is garnet, have one of blue and one of yellow. Fasten these strips underneath the fringe on the drapery, then take a bright coloured coarse silk and tie these three fringes into little tassels, drawing the under colours forward to give a variegated appearance."

Footstool.—Obtain a box about ten by twelve inches in size, remove projecting nails, if any, then line the inside with crimson or blue paper muslin, so that it will not be unsightly if kicked over; then cover outside after having made and put on a cushion of cheap material. Shape the cushion until it pleases the eye, and tack on about the edges. The final covering should conform in colour to furniture in the room.

Red moreen or damask wear best, but the crteonne chintz is as cheap as anything, and infinitely prettier and cleaner, for it washes well. Take the piece of whatever material it may be that you intend for the top, and nail on all round with a broad furniture gimp, or fringe, and brass-headed nails. The sides are to be covered with the same material, and can either be padded or the stuff put on plain. If this is thin, it must have a cambric lining, or probably the wood of the box will show through; fasten this on by the same arrangement of gimp and brass nails as you did the top.

The footstool may be made more attractive by covering with velveteen and not using the cushion, but lay a little curled hair, fullest in centre, on the top of the box. Crimson velveteen is prettiest. Put the velveteen on smoothly and tightly, and fasten with brass-headed tacks, placing them at equal distances. A tassel of wool or silk placed at each corner will improve the appearance of the ottoman, but is not absolutely necessary.

Window Seats.—Seats beneath the windows of sitting or dining rooms are a great comfort. Boards twenty inches wide, and as long as the windows are wide, are all that are required, save supports which may be improvised. Cushion the tops with whatever soft material you have, and cover to the floor with pretty chintz or woollen goods.

FURS.

Furs and Skins for Mats.—Very handsome floor mats are made by tanning skins of large fur bearing animals, then dyeing them some bright colour, which is done with very little trouble, the art of dyeing is now so familiar to almost every household. Furs may be dyed as easily as woollen goods, notwithstanding the impression that it is an art known only to the trade. Any dye that will colour woollens will also dye furs. One care must be taken not to have the dye too hot, or the texture of the skin will be injured.

Tanning Skins and Furs.—The mode of tanning usually followed by furriers is to rub the skins well with rancid butter, then tread them thoroughly in a tub or vat, after which a large quantity of sawdust is mixed with them, and the process of treading continued until all the grease is absorbed, when they are finished off by beating, working, and rubbing with chalk and potters' clay, whipping and brushing.

An old trapper practised this method with small skins, first washing with a suds of soap and sal soda to free them from grease, then rinsing in clear water to cleanse them from the suds, then rubbing as dry as possible, after which they were put into a mixture of two ounces of salt to a quart of water, added to three quarts of milk or bran water, containing one ounce of best sulphuric acid.

They are stirred briskly for forty or fifty minutes, from this they are taken dripping into a strong solution of sal soda, and stirred till they will no longer foam; they are then hung up, and when nearly dry are taken down and rubbed dry, when they are very soft and pliable.

A very good and simple process in use among farmers is to sprinkle the flesh side, after scraping it well, with equal parts of pulverized alum and salt, or washing it well with a strong solution of the same, then folding the flesh side together, and rolling it compactly, in which state it should remain for eight or ten days; then it is opened, sprinkled with bran or sawdust to absorb the moisture, and rolled up again, and after remaining twenty-four hours the process is completed by thorough rubbing and manipulation, on which the pliability depends.

Skins when taken off should be freed from grease or flesh, by thorough scraping, when they may be dried and left to await the leisure of the owner. Previous to tanning they must be well soaked and wrung dry.

How to Colour Skins.—To colour buff: Five parts whiting to two parts yellow ochre, and mix them with water to a paste; make into cakes and dry. When a dressed skin is dry, rub one of the balls on the surface; rub the powder in; take a piece of sand paper and raise a nap on the leather by going over with it. This is simply to colour the leather side.

To colour black: Use clear logwood; after it is dry use copperas water to blacken it. Be careful not to use too much copperas.

To colour dark brown: Five pounds oak bark, four pounds fustic, fourteen ounces of logwood. Use alum water to make it permanent.

To colour orange: For five pounds skin, muriate of tin, three ounces; ox gall, four ounces; boil and dip one hour; then add fustic, two and a half pounds; boil ten minutes and dip one-half hour, and add again madder, one teacup, and dip again one-half hour. Cochineal in place of madder makes a much brighter colour; add in small quantities about two ounces.

To Clean Sable and Mink Furs.—In order to have the skin free for treatment, the first thing to be done is to unpick and take out all silk lining, wadding, etc., that may have been used in making up the muff or tippet. Then take one gallon of water, half a pound of white or best mottled soap, and a handful of bran. Cut up the soap and boil it in the water until it is dissolved; then let it cool till nearly lukewarm, and mix in the bran. With this fluid almost any kind of fur may be cleaned.

A honeycomb sponge is the best material to use in applying the fluid, the object being to cleanse the fur without wetting the skin more than can be avoided. Having cleaned the fur with this fluid, still warm, it must next be thoroughly rinsed with clean water, well blued in the usual way. The same sponge will do for this purpose as was used in the first instance.

After this treatment, the fur must be dried as quickly as possible, but not before a fire, unless at some distance from it, shaking the skin repeatedly while it is drying, to prevent the hair from matting together. If the skin has become wetted by the operation, and dries hard, it must be rubbed soft before making up.

Finally, the fur will require a good deal of brushing to bring the hair once more to follow the grain of the skin. Another and more simple way of partially cleaning fur is merely to brush it, using dry pipe clay on the brush. This method, however, is better suited to keep fur clean when it is so, than to renovate it when it is much soiled.

Making up Furs.—The novice cannot learn half so well from printed hints how to make gloves, collars, etc., as to use an old article for pattern. By carefully cutting the seams of a used up pair of gloves or a collar, those which were good fits, the new skins may be cut by the different parts, and sewed together so as to make sightly articles of wear.

How to Tell Good Furs.—When examining skins for making up, or when purchasing fur garments, a good test as to quality is to blow briskly against the incline or set of the fur. If the fibres open readily, exposing the skin to view, reject the article; but if the down is so dense that the breath cannot penetrate it, or at most shows but a small portion of the skin, the article may be accepted.

Care of Furs.—Ladies, as a general rule, imagine that care in putting away furs is all that is required; they think they can wear them when and how they please, provided they expend a few pence for camphor when they lay them aside. This idea should be corrected. More harm is done to furs by wearing them for a week after the weather has become warm than during the whole season.

When they are put aside they should be brushed the right way with a soft brush, an old linen handkerchief folded smoothly over them, and a piece of gum camphor kept in the box all the time, or put them in a close box, and with good paste or gum fasten a strip of paper over the crack left between the lid and box and put them in the closet. The autumn will find them safe and free from the unpleasant odours that tobacco, camphor, etc., always leave in furs.

Another very good way is to put the furs in a paper sack, tied up closely, so that the most minute fly cannot reach them. Put them in a dark place, and they will come out in good condition when needed.

How to Repair a Muff.—When muffs are bought they are often lined with cheap silk, that soon wears out. To repair them take some broad ribbon, brown for an elderly lady, scarlet or crimson for a girl. Take a piece of soft, red flannel, for the inside of the muff, and place the ribbon lining on it so that it will bring it just the right length and width when sewn in. Sew it up and have it all made neatly, ready to put in and sew around the edges. Use fine, silk thread, the colour of the lining.

Pin it in place before commencing, else it will draw unevenly. If the tassels are worn out and beyond being respectable, take a bit of ribbon two inches wide, the colour of the lining, and make a bow with ends and fasten on where the seam comes together.

CARE OF GLASS ARTICLES.

Cleaning Mirrors.—Never allow the plate of a mirror to be cleaned with newspaper. Almost all newspapers now used contain straw as a component, and as the substance of straw is largely composed of silex (flint), which cannot be entirely eliminated in the process of manufacture, the result is a multitude of minute scratches on the face of the glass, not always visible to the naked eye singly, but finally in a mass producing a cloudy and dull appearance, ruinous to the glass. Chamois skin kept in a drawer free from dust, and the delicate tissue paper, are the best materials for glass cleaning.

Repairing Mirrors.—Take a piece of a broken mirror and mark out with a knife point a section a little larger than the place to be repaired, put a drop of mercury upon it, and in a short time the material may be lifted off by means of a thin blade and conveyed to the bare place; after placing it carefully, press it down with some soft material like raw cotton. Before applying the quicksilver be certain that the damaged spot is made perfectly clean, as any specks or greasy spots will make the work incomplete. Perhaps the work can be more effectually done by sliding the mercury from the broken piece of glass. Repairing mirrors needs a little practice first upon pieces.

Silvering Mirrors.—Take a sheet of tinfoil and spread it upon a table; then rub mercury upon it till the two metals incorporate. Lay the plate of glass upon it and load it with weights, which will have the effect of pressing out the excess of mercury that was applied to the tinfoil. In a few hours the tinfoil will adhere to the glass and convert it into a mirror.

To Protect Mirrors.—A mirror hung where the sun can shine on it is usually spoiled; it takes a granulated appearance familiar to housekeepers, though they may not be acquainted with its cause. In such a state the article is nearly worthless; the continuity of its surface is destroyed, and it will not reflect outlines with any approach to precision Care should therefore be exercised in hanging. When moving from one house to another, not unfrequently a man or boy may be seen in the street carrying a mirror in such a way that the full glare of noonday sun strikes and injures. Owners of such articles would, as a rule, be able to keep and use them much longer if they would exercise more caution in this regard, Avoid hanging a mirror near a stove or fire-place. where the heat radiated can reach it. If this precaution is neglected, granulation is likely to occur, even in a comparatively dark room, by the influence of warmth instead of light. A lamp or gas jet, if placed too close while burning, though it may not crack the glass, will often bring about the same injurious crystallization. In packing mirrors for removal, they should be placed by themselves in a box, and fixed in their places by side pieces and wedges, driven closely and nailed; laths should be placed across mirrors, and no elastic materials, as pillows or feather beds, be used in packing them.

To Clean a Globe.—If the globes on a gas fixture are much stained by smoke, soak them in tolerably hot water in which a little washing soda has been dissolved. Then put a teaspoonful of powdered ammonia in a pan of lukewarm water, and with a hard brush scrub the globes until the smoke stains disappear. Rinse in clean, cold water. They will be as white as if new.

To Perforate a Globe.—It is said that a small hole may be bored through the top of a glass globe by first cementing to the glass with beeswax a small block of wood, with a hole in the centre as a guide.

Then procure a piece of copper tube of the diameter required and of convenient length for the drill. Pass the thread of a bow string around the tube, supply it with the finest emery and water, and work the bow back and forth, so as to twirl the drill (the tube). The hole will soon be cut through the glass. This will answer for perforating glass of any kind.

How to Drill Glass.—A hard steel tool will cut glass with great facility when kept freely wet with camphor dissolved in turpentine. A drill bow may be used or even the hand alone. A hole bored may be readily enlarged by a round file. The ragged edges of glass vessels may also be thus easily smoothed by a flat file. Flat window glass can readily be sawed by a watch spring saw by aid of this solution. In short, the most brittle glass can be wrought almost as easily as brass by the use of cutting tools kept constantly moist with camphorized oil of turpentine. It is said diluted sulphuric acid is much more effective, with less wear of the tool, than oil of turpentine. It is stated that at Berlin glass castings for pump barrels, etc., are drilled, planed and bored like iron ones, and in the same lathes and machines, by the aid of sulphuric acid.

To Cut Glass.—The same liquid, turpentine and camphor, as used in drilling, may be used in cutting with any steel instrument, or even a sharp edge of an arrow point or fragment of flint. I have used in a chemical laboratory a small flame from an alcohol lamp for cutting, or rather cracking, glass. First at the edge file a notch for a starting point, then apply the flame, which may be produced through a minute perforation in a glass connected with some rubber piping, so as to allow of the flame being conveniently carried from point to point. The crack will run before the flame in any desired direction.

To Divide a Tube.—Place the tube in a vessel of water, to the height where it is designed to break it; also fill tube to same level. Now pour coal oil inside and out on the water; cut a ring of paper fitting the bottle or tube; saturate with alcohol or benzine so that it touches the oil. Pour also some inside the bottle. Set on fire; the cold water prevents the glass from heating below its surface, while the expansion caused by the heat will break the vessel on the water line.

Cheap Glass Cutter.—A correspondent gives the following simple way of making a good glass cutter. With the addition of camphorated turpentine, it will probably answer the purpose of a diamond. Take an old, worn out, three cornered file, grind the end to a three cornered point, heat it red hot, and immediately plunge into a mixture of snow and salt. Retonch it on the stone to remove the scale, and it is ready for use. If rightly done it will give very good satisfaction. In using it, hold the file nearly perpendicular, slightly inclined forward, and with a gentle pressure draw it rapidly over the glass without changing its inclination to the surface. In cutting thick glass it is safer to cut on both sides before attempting to separate the pieces, but thin glass may be cut with the greatest facility. When the point becomes dull from use it will produce only a ragged surface—scratch, but will not cut. It then needs regrinding. A single turn of the stone is sufficient to put it into working order again. Such a glass cutter is serviceable for preparing glass for various purposes. The sharp corner of a piece of flint will sometimes cut glass readily.

To mend Tumblers.—For mending glass tumblers to be used for keeping jellies, etc., in, white lead is good; in fact almost any of the cements used for broken dishes are; but for ornamental glassware a transparent cement is required. Balsam of fir used in a thick state is excellent, but will not stand hot water. Seventy-five parts India rubber mixed with sixty parts of benzine and fifteen parts of mastic is said to be a good transparent mixture for repairing glass, but I have never tested its virtue.

To Remove Glass Stoppers.—Take the bottle or decanter by the neck with the left hand, and place the first finger at the back of the stopper. Take a piece of wood in the right hand, and tap the stopper first one side and then the other, turning the decanter around in the hand. A quick succession of little, short taps, is the most effective. If this plan fails, wind a bit of rough string once around the neck, one end of the string being held by one person, and the other by another; pull backward and forward till the neck becomes hot with the friction. Then tap as before. Where the stopper is not loosened by mechanical influences alone, put one or two drops of sweet oil round the stopper, close to the mouth of the bottle, then put it a little distance from the fire. When the decanter gets warm, have a wooden instrument with a cloth wrapped tightly round it; then strike the stopper, first on one side, then on the other; by persevering a little while you will most likely get it out. Or you may lay the bottle in warm water, so that the neck of the stopper may be under water. Let it soak for a time, then knock it with a wooden instrument as before. Sometimes they may be loosened by binding around the neck of the bottle a cloth wet with boiling water. Another way recommended is to put a drop or two of glycerine in the crevice about the stopper. In an hour or two the stopper will be loose.

To mend Broken Glass.—Most of the substances used in mending broken glass, so colour the seam that it gives it a bad appearance. Gum shellac is the best material I ever applied for mending tumblers, bottles, etc. Dissolve the shellac in alcohol until about the consistency of molasses, and apply with point of penknife or splinter of wood. It sets quickly and makes the mend firm, and will stand any common usage; boiling water, however, will soften the cement and sever the parts. Another way is to dissolve fine glue in strong acetic acid to form a thin paste.

To Clean Bottles, Etc.—To clean glasses, bottles and decanters brightly, break a few raw egg shells in the articles to be cleansed, with a little cold water—if greasy, warm—and a little soda; shake well, rinse with plenty of cold water, and the objects will shine as nothing else will make them. Another way is to rinse them out thorougly with water and powdered charcoal. Charcoal allowed to remain in for a few hours will act as a good disinfectant. When greasy substances have not been used bottles may be cleaned by half filling with tea leaves and a little water, and then add a spoonful of common vinegar; proceed to shake all together thoroughly, then empty, and rinse well with cold water. To clean flasks and small necked vessels chemists use blotting paper, with enough water to make it into a pulp. Vigorously swung round, this will clean the dirtiest vessel. My process to thoroughly clean a bottle that is to be used for medicine, is to wash with hot water, soap, sand and ashes. Shake well, then rinse thoroughly with ammonia water, finally with clean water, then set the bottle top downward to drain. After apparently dry, put in an oven and bake for an hour, then rinse with pure alcohol, cork it up and put it away for use. All bottles about a house should be kept labelled.

Musty Bottles.—It is often the confined air, and not the bottle, that is musty; because in washing, the bottle being but partly filled with water, the air is but partly expelled. After washing the bottle, it should be filled to overflowing with cold water, and it will be found perfectly free from mustiness.

Simple mode of Toughening Glass.—A Leipsic journal gives a method which it asserts will prevent lamp chimneys from cracking. The treatment will not only render lamp chimneys, tumblers, and like articles more durable, but may be applied with advantage to crockery, stoneware, porcelain, etc. The chimneys, tumblers, etc., are put into a pot filled with cold water, to which some common table salt has been added. The water is well boiled over a fire, and then allowed to cool slowly. When the articles are taken out and washed, they will be found to resist afterwards any sudden changes of temperature.

To Clean Glass.—A street lamp cleaner, in New York City, says that the best article for cleaning glass is kerosene. He used that sometimes mixed with sperm oil and stove blacking, but the best recipe for removing stubborn, sticky dirt on glass is a little oxalic acid, a little alcohol, and equal parts of kerosene and sperm oil. And a curious thing about it is, that the older and dirtier his rag gets, the better it seems to clean the glass.

To Clean Lenses.—The lenses of spectacles or spy glasses that have become scratched and dimmed by age may be cleaned with hydrofluoric acid, diluted with four or five times its volume of water. The solution should be dropped on a pad of cotton and thoroughly rubbed on the glass, which should afterwards be well washed in clear water. Great care must be exercised in handling this acid, as it eats into the flesh, often producing painful and obstinate sores.

Care of Spectacles.—Always note the number of your glasses and the date of first using them—if lost, you can tell what number you want. Glasses should be washed in cold water every day, wiped dry with a linen fabric and then with buckskin, never with paper as it scratches them.

Cheap Frosting for Glass.—It sometimes happens that a housewife wishes some glass article frosted, and it may be done without expense. The panels in doors are frequently frosted by daubing the end of a new, dry paint brush against the glass upon which has been spread a very thin layer of white paint. One writer upon this subject says he has found no material more simple than skim milk, with a little powdered whiting mixed with it, say as much whiting as the size of a walnut, reduced to a fine powder, and thoroughly mixed with two or three quarts of milk. I would advise those trying the method to do a piece of glass first. Let it dry, and add to the milk or whiting as they require less or more shading. If it be put on quickly and thinly with a brush, and followed at once with a dry duster brush, merely daubing it quickly with the dry brush, the shading will have the appearance of shaded, ground glass, and look quite neat. A common preparation for frosting glass to prevent the too direct action of the solar heat, is a wash of whiting and glue water. It must not contain too much glue if it is desired to wash it off late in the season. Sometimes this frosting is desirable for the shading of house plants. Frosted glass, useful for screens, etc., is made by laying the panes horizontally and covering them with a strong solution of sulphate of zinc. The salt crystallizes on drying.

To Letter Glass.—To letter with gold and silver leaf on glass, prepare the size by dissolving one ounce of isinglass in just enough water to cover it; when dissolved, add a pint of good alcohol and make up to a quart with water. Give the clean glass a flowing coat of this and carefully lay on the leaf, which will then readily adhere to the glass. Let it remain twenty-four hours to dry. The design or letter is drawn on paper, and the lines pricked with needle holes. Place this against the gilded surface and dust it thoroughly with powdered whiting. When the paper is removed, there will remain a correct copy of the design or letter on the gold. Now fill up the outline with oil gold size in which has been ground some orange chrome, thinned somewhat with boiled oil and turpentine. When this has thoroughly dried, wash off the surplus gold with water, applied with a tuft of cotton.

To make Glass Jars look like China.—After securing the figures, cut them out, so that none of the white of the paper remains; then take some thick gum arabic water, pass it over all the figures, and place them on the inside of the glass, to taste. Let them stand to dry for twenty-four hours; then clean them well with a damp cloth betwixt the prints, and let them stand a few hours longer, lest the dampness should move any of the edges; then take white wax and flake white ground very fine, and melt them together. With a japanning brush go over all the glass and above the prints. Done in this manner, they will hold water. Or, boil isinglass to a strong jelly, and mix it up with white lead, ground fine, and lay it on in the same manner; or use nut oil and flake white. For a blue ground, use white wax and Prussian blue; for red, wax and vermillion or carmine; for green, wax and verdigris; for chocolate colour, wax and burnt umber.

Glass Transparencies.—Mrs. Caroline S. Jones, who has written much concerning domestic arts, has furnished the following very excellent directions for making glass transparencies, such as shades for lamps, panels for outside doors and window panes (desired obscure), besides lanterns for halls, vestibules, and other positions, in this style, which are extremely chaste and effective. The best designs for this work are the statuary figures photographed or engraved. Take the picture and place upon it the ground glass, cut in proper shape and thoroughly cleansed; then sketch off the design with great care (if ground glass cannot be procured readily, varnish plain glass with dammar, using it rather thin and applying smoothly; when dry until merely sticky, place very sheer swiss, or fine, close-meshed bobbinet over it, rolling perfectly smooth, and until it unites with the varnish in every part).

Having sketched in the manner described, or by pricking the outlines on paper, placing this on the glass (rough side), dust lightly with a pumice bag, using fine black powder of some kind, then lifting the paper, the design will remain in minute dots, which may be readily drawn out.

Next proceed to shade with drawing pencils Nos. BB, B, F, HB and H, using a buckskin "stump" or the stub ends of old camel's hair brushes. Rub down and soften all rough outlines, blending and mellowing the shades until the true effect is obtained of the carved marble statue.

This must be carefully done, following the lights and shades suggested by the photograph or engraving. The high lights and deep, dark shadows are to be touched up last, the former with mastic varnish, the heavy strokes with black crayon, shaded and "stumped" until the desired effect is produced.

When the figure is thus satisfactorily finished, the entire ground must be filled in with opaque black, made by rubbing up lamp-black with copal varnish, or tube paint will answer, if more convenient.

Clear glass may be used if the design, after being outlined, is painted over with two coats of dammar (antique) varnish. The work is made very much finer by constant applications of the pencils, touching and retouching, "stumping," and shading repeatedly, until no sharp lines mar the softness. These transparencies are exquisitely lovely, the statuary appearing to stand out in bold relief with soft, white, statuesque beauty against the deep black background.

Where it is desirable to have coloured transparencies, the ground may be laid with any transparent colour, Prussian blue, any of the lakes, mixed with dammar varnish, as crimson, lake and Prussian blue for a rich purple, vivid emerald green from yellow lake and Prussian blue, etc.

GLASS TRANSPARENCIES WITH ENGRAVINGS.—Have the glass perfectly clean, and apply a coat of antique varnish, dry and give a second coat. When these are dry apply a third coat, and when dry until sticky, it is ready for the engraving. This should be laid between the folds of a damp towel until thoroughly moist, sprinkling a little salt in the water. Then place it (face down) on the varnished side of the glass, and with a pad pat and press every part of it until all air bubbles are expressed, and there is full assurance that each part adheres closely to the glass.

When the whole engraving has been firmly fixed, moisten the finger in clear water and commence rubbing off the white paper from the wrong side, rolling off the minute pellets as they form beneath the finger; as the engraving is approached great care will be required, in order not to disturb the mere film of ink, which if destroyed would mar the engraving. Dry thoroughly, and if any white spots or dim places appear, again dampen the finger and remove them.

The picture should appear quite perfect when the clear glass is placed upon a solid ground for the purpose of rectifying any blemishes. Then if coloured designs are desired, take transparent paints and tint according to the shades of the engraving, which any mere tyro in the art may readily accomplish, and when dry put on the ground, then again dry and apply white antique (dammar) varnish. These transparencies are lovely beyond description.

Glass Hanging Shelves.—Take as many long, narrow lights of glass as you wish shelves, and drill holes through each corner. Bind each shelf with ribbon and pass ribbon from one hole to the other, at both ends of the shelf, so that the glass may be held in a sort of sling. Pass ribbons backwards and forwards through the holes of the next shelf, so as to go both under and over. The third shelf is similarly treated, the three being separated by such distance as you may desire. Lastly catch the four ends of ribbon, two at each end, together under a rosette, and hang the whole by the rosette to a hook in the wall, and put bows beneath each hole in the lower shelf. Now arrange your shells and minerals at your leisure.

Hanging Basket.—Broken goblets and tumblers can be made into very pretty ornaments for the window by crocheting a bag of macramé thread to suspend them in. The stem of the broken goblet should be taken off up as close to the base of the bowl as possible. The less work put upon the crocheted bag the prettier it will be. Have a handsome cord to suspend it by, and a tassel at the bottom if you choose.

Varnish for Glass.—A thin solution of gelatine applied to a plate of glass, which is supported horizontally until dry, makes a good surface for pen and ink drawings for transparencies. Terquem prepares a varnish for glass on which drawings can be made, either with India ink or with ordinary ink. Four parts of gum mastic and eight parts sandarac are placed in a well closed bottle with eight parts of ninety-five per cent. alcohol, and warmed in a water bath, then filtered. When used, the glass is heated to 122° to 140°. and the varnish flowed over it. After the drawing is done, it is flowed with a weak solution of gum. The varnish is very hard, and on warm glass it is brilliant and transparent; but when cold it is opaque, and absorbs the ink. It can be employed for putting labels on glass bottles, etc.

Marine Cement for Glass.—To cement glass letters, a thick solution of marine glue in good naphtha will answer if colour is no object. But the glass must be chemically clean, and this is not always easy. The least trace of soap or grease will spoil the adhesion of any cement. Try soda or ammonia, following by whiting and water, clean cloths, and plenty of rubbing, and let the cement dry on the letters till the surface just begins to be "tacky" before you apply them.

BALSAM OF FIR CEMENT.—This makes a very good cement when not exposed to heat. It is to be warmed and applied to the glass, previously warmed. It is used for cementing lenses, mounting microscopic objects, etc., and does very well for broken glass which is not to be washed in warm water. The thicker the balsam the stronger; when too thin it may be thickened by gentle evaporation.

GUM ARABIC.—If to a strong solution of gum arabic, measuring eight and one-half fluid oz., a solution of thirty grains sulphate of aluminium, dissolved, two-thirds ounce of water be added, a very strong gum is formed, capable of fastening porcelain or glass.

KOURIE CEMENT.—A gum has been introduced into the trade, obtained from trees in New Zealand; it is called kourie, and has been found to be a most excellent, strong and water-proof cement for calking tanks and cementing pieces of glass, stone or wood together. Before using, it is fused and mixed with one-third part of its weight of castor oil.

GLYCERINE CEMENT.—A cement for bottle tops, that will keep the most volatile liquids from evaporating, may be made by mixing finely ground litharge and concentrated glycerine. It dries quickly, becomes very hard, and is easily removed with a knife. Glycerine also mixed with gelatine imparts to it many useful qualities. It answers well to hermetically seal bottles. It will solidify on cooling, without losing its ductility.

DIAMOND Cement.—Isinglass one ounce, distilled vinegar five and a half ounces, spirits of wine two ounces, gum ammoniacum half an ounce, gum mastic half an ounce. Mix well.

ALCOHOL CEMENT.—Dissolve shellac in alcohol and evaporate until a paste is formed as thick as honey. Apply to the broken edges of glass with a fine brush. This will do for common usage, but not for glass table ware, as the shellac will dissolve in warm water.

TUMBLER CEMENT.—For cracked or broken tumblers white lead is as good as anything, provided they are to be used simply for storage of jellies, etc. They should be repaired long enough in advance to allow time for thoroughly drying.

CASEINE CEMENT.—A cement to stop cracks in glass vessels, which will resist moisture and heat, is made by dissolving caseine in a cold saturated solution of borax. With this solution paste strips of hog's or bullock's bladder, softened in water, on the cracks of glass, and dry at a gentle heat. If the vessel is to be heated, coat the bladder on the outside, before it has become quite dry, with a paste of a rather concentrated solution of soda and quicklime or plaster of Paris.

Hot Cement.—To cement glass, cut three parts of good India rubber into small shreds; dissolve it by agitation in thirty-four parts of cold naptha. Add to this sixty-four parts of shellac in fine powder, and heat the whole, with constant stirring, until the shellac is dissolved. Then pour it while hot on metal plates, to form sheets. When required for use heat to 250 degrees Fah., and apply quickly, or dissolve seventy-five parts India rubber in sixty parts of chloroform or benzine, and add to the solution fifteen parts of mastic.

Bottle Cement.—When a cement is to answer only a temporary purpose, as for instance in making the corks or stoppers of bottles perfectly air and vapour tight, it will not do to employ a kind which becomes very hard, as is the case with oil and lead compounds, nor again, other kinds, such as wax and resin, which are softened by many chemical vapours. The best cement in such cases is red lead, or finely powdered litharge mixed with undiluted glycerine. This hardens soon enough, and when required, can be easily removed or:—

Resin fifteen parts, tallow four (or wax three) parts, highly dried red ochre six parts, or lamp black sufficient to give colour.

GLOVES.

Kid Gloves.—In selecting kids, it should not be the object to obtain a thick or very thin pair, those of medium thickness usually being the toughest and best. Much depends upon the condition or kind of leather; if soft, oily, and will stretch easily, they usually wear well. By saying that, much depends upon the kind of leather, I mean the kind of animal from which the skin was taken, although the matter cannot be determined by all when examining the gloves; so perfectly has the art of tanning rat skins made them imitate the real kid that none but experts can detect any difference. The skins of the Siberian rats, the sewer rats of Paris, the common wharf and house rats are used. The process of cleansing, bleaching and dyeing rat and kid skins are so similar that by the time the two kinds are placed beside each other in the same box, the affection for the young goat and the repugnance of the rat are entirely forgotten.

To Put On.—When purchasing gloves, people are usually in too much of a hurry; they carelessly put them on, and let them go in that way *then*, thinking to do the work more completely at another time. When this is the case a person is sure to meet with disappointment, for as the glove is made to fit the hand the first time it is worn, so it will fit ever after, and no amount of effort will make a satisfactory change.

Never allow a stretcher to be used, for the gloves will not be as likely to fit as well for it. All of the expansion should be made by the hands; if the kids are so small as to require the aid of a stretcher, they should not be purchased, as they will prove too small for durability, comfort or beauty.

When selecting gloves, choose those with fingers to correspond with your own in length; take time to put them on, working in the fingers first, until ends meet ends, then put in the thumb, and smooth them down until they are made to fit nicely.

A glove that sets well will usually wear well, at least will wear better than one of the same kind that does not fit well. When the ends of the fingers do not come down right, or when they are so long as to form wrinkles upon the sides of the fingers, they will chafe out easily. Where the stretcher has to be used to make the fingers large enough, the body part will be so small as to cramp the hand so that it cannot be shut without bursting the seams of the kids.

Some recommend putting new kid gloves into a damp cloth before they are put on, and allowing them to remain there until moistened. With this treatment they can be put on much easier than otherwise, and will fit very nicely until they get dry; but on second wearing there will be an unnatural harshness about them, wrinkling in spots, and they will not set so perfectly as at first. I have tried the dampening process and do not approve of it.

Put on your right glove first. Then you have your left hand ungloved to button your right with. If you put on your left glove first, you have to button your right glove under disadvantage.

Care of.—When gloves are removed from the hands they should not be wadded up and laid away in that condition, for they are very much injured in appearance by such treatment. It is a very common practice to place the gloves together and turn one of them inside out over the other, or to wad them up and cram them into the pocket. With such use they never can be made to set or look well upon the hands, there being a rough, wrinkled appearance which shows as much to disadvantage as would any cloth garment "mussed up" in the same way

As soon as gloves are taken off, the fingers and hands should be smoothed out nicely, and the pair laid away in that condition; if they are damp, let them dry upon the hands, rubbing them lightly during the time.

Where they are to be carried in the pocket straighten them out, lay the insides together, and roll them from side to side, and put them into the pocket with fingers up.

Injury to kid gloves from perspiration of the hand in hot weather will, it is said be prevented by applying ordinary dry starch to the hands before drawing on the gloves.

To Mend.—Mending should be done as soon as there is a fracture; the old saying that "a stitch in time saves nine" is more fully verified in kid gloves than almost any other article or garment of wear.

Where a seam bursts open it may be mended by the common over and over stitch, but where a fracture is made in the leather an altogether different treatment is required to make the repair a substantial one. In mending, silk thread of the same colour of the gloves should always be used.

Where the leather has been torn, first sew around the edges with a buttonhole stitch, then draw the fracture together by cross stitch, merely catching the thread into the first stitches made. In this way gloves may be mended so as to possess as much strength as at first; but sewing into the leather with single stitch will not avail much.

Cleaning.—Benzine is used very extensively, and is good for extracting grease and stains, but should not be used upon purple or other very delicate colours, for the dyeing is not usually permanent enough to stand benzine, and sometimes will give way to the alcohol and ammonia. Buff will stand either of the above. The best manner of applying these cleansers is to put the kids on, and wash the hands until the dirt is removed, then work them dry by rubbing one hand over the other.

Where the gloves are not cleaned upon the hands, they should be spread out upon three or four thicknesses of cloth, and the leather rubbed towards the fingers; it is always the best way, however, to do the cleaning with the kids upon the hands, keeping them there until dry. When washed in this way every part may be successfully reached. Keep away from the fire or a lighted lamp while using the benzine; or:—

One of the safest and best processes for cleaning kid, either gloves or infant's shoes, especially the light blue shade, is sweet milk and Castile soap. Rub the gloves thoroughly with a flannel cloth, which has been first dampened in the milk and then coated with the soap, then use a clean flannel dampened only, and dry carefully. They will be found to have nearly if not quite the original polish; or:—

Alcohol and ammonia, equal parts, are good; the gloves should be rubbed after washing until entirely dry. Alcohol and camphene mixed, equal parts, is also used. Lay the gloves on cloth and first rub the surface gently with the solution, then dip each glove into a cup containing the liquid, lift it out, squeeze it in the hand, and again rub it gently with the sponge to take out all the wrinkles. After this, gather up the cuff in the hand and blow into it to puff out the fingers, when it may be hung up with a thread to dry. This operation should not be conducted near to a fire, owing to the inflammable nature of the camphene vapour; or:—

A soap is made by compounding three ounces of good hard soap, melted in one ounce of warm water, one ounce of hyposulphite of soda, and one drachm of liquid ammonia. This liquid is applied to the stretched glove by means of a piece of flannel, When the gloves have become chafed or spotted, the appearance may be improved by touching the spots with ink or any other colouring substance of same shade. Sometimes, when they have become dingy, especially black, and look as if needing dyeing, they may be greatly improved by taking common table or salad oil, and adding to it enough ink to give it the complexion of the kid. A few drops of black ink in a teaspoonful of oil will be sufficient for redressing a pair of black kids several times. Apply lightly with a feather and let the glove dry.

Black dye.—Steep three handfuls of logwood chips in an earthen vessel until the strength is well extracted; add a little copperas and a little alcohol. Put the gloves on the hands, brush over with the mixture, and rubbing gently let them dry there, which they will soon do. If not black enough brush over a second time and dry as before.

KNIT ARTICLES

Knitting and Crocheting.—"Ladies who are fond of knitting and crocheting are often prevented from making the pretty things they see by not knowing how to shape the article. They recognise the stitch of the cloak, cape or hood at the first glance, but how can they shape the garment to make it set snugly and stylishly, unless by a happy chance some friend has one of the kind to lend for a pattern? 'Even the printed directions are often so vague,' they say, 'not telling how many stitches to put on a needle, or how long a chain to make for a foundation, and no statements of the number of stitches after widening and narrowing, or of how much wool is required.'

"The directions are necessarily vague on these points, because if you wish, for instance, to knit a mantle for a girl of seven years old, it is clear that you must have more wool than for one for a child of four; and then again, a knitted basque, which is considered lovely in shape by one lady will be pronounced hideous by another, and yet the same stitch and general directions for making it would suit equally well for another shape that the latter lady would consider exquisite.

"The best plan is to obtain from a pattern the exact shape you desire, cut the garment out of lining muslin and fit it nicely to the figure, and you have an accurate pattern for your knitting and crocheting, and can tell by measurement how many stitches to begin with, and where to widen and where to narrow.

"If you are not sufficiently practiced in such work to make an estimate of amount of material required, take your muslin pattern to the shop where you purchase your wools, tell them the stitch you intend to use and whether it is to be knitted or crocheted, and they will give you the number of ounces required. If you live at a distance from the shop send exact measurements and descriptions in place of the pattern."

CHILD'S SKIRT.—Use two bone or wooden needles about three times the size of common knitting needles. To make a skirt for a child of five years, cast on sixty stitches of yarn for a front breadth and eighty stitches for each side breadth.

Knit first row plain, second row seam, third row plain, fourth row knit first two stitches together, then two stitches singly, thread before needle, knit one stitch, thread before needle, knit three stitches, take off a stitch, knit a stitch, bind; continue so across the row. Fifth row seam; sixth row like fourth row. Then knit across plain, then knit across seam, then knit across plain, then repeat from fourth row. This makes a wave-like border, which can be knit as wide as desired for the bottom of the skirt. The top is simple ribbing; two stitches plain, two seam. A lady's skirt has one hundred and twenty two stitches on each breadth.

Another pretty border for skirts is the checkerboard design. For a child's skirt cast on one hundred and eight stitches for the front breadth, and fifty-four for each of the two back breadths. Knit ten rows plain, eleventh row knit two stitches together, thread in front of needle, two stitches together thread in front of needle, and so on the entire row. Then knit ten rows plain, one row seam, one row plain, one row seam. For the next row knit six stitches plain, six seam, six plain, six seam entirely across the needle. This commences the checker blocks, and the succeeding five rows are knit in the same manner, being careful to reverse the seaming so that plain stitches come above plain, and seam above seam. You now have one set of blocks complete, when you may proceed in the same manner to knit another set, having them alternate with the first; seam stitches above plain and plain above seam. Five sets of blocks make a nice wide border.

If on first reading, these directions seem complicated, it will not take long to knit a trial strip, casting on half or quarter the number of stitches, and by following these specifications the result will be sure to be satisfactory.

Sofa Afghan.—First in giving directions for making this afghan, the combination of its colours being particularly rich and uncommon, it will be necessary to state what they are. Get of single wool some black, the darkest, and a bright shade of scarlet, three shades of orange, the darkest of which will blend with the bright scarlet, a lemon colour, and white—eight shades in all.

Crochet of the black a chain two yards long, turn and knit seven short stitches, in the eighth stitch of the chain putting three stitches; then knit seven more short stitches, skip two of the chain, knit seven, in the eighth knitting three, and so on until the end of the chain is reached, thus forming it into points. Each successive row is composed entirely of short stitches, no other kind of stitch being employed in the body of the afghan.

The second row and all others are merely a repetition of the first; two stitches being skipped where they are in the first, and three being knit into the centre of each cluster of three in the first; the stitches of each row are taken through the outer half of those of the preceding. Knit three times across with the black wool and also three times across with each of the other shades in the following order:

Next the black use the darker scarlet, then the bright scarlet, the darkest orange followed by the two lighter shades, the lemon and the white. These twenty-four rows form what we will term the first stripe of the afghan. The second stripe is commenced with black, the other shades following in the order described above. In this combination of colours, the black and white being side by side, is very effective.

Five stripes complete the body of the afghan, two sides of which have straight edges, and two pointed ones. The straight edges are finished with a soallop, and the points are left without finish, unless a tassel attached to each is liked.

If Berlin wool is preferred, it will take five ounces of each shade; other kinds in proportion.

This afghan is beautiful made of all the shades of scarlet, from the darkest to the sea shell tint; next the lightest shade crochet three rows of dark scarlet filling silk, finish the edge all around with a chain stitch in silk, and provide each of the points with a silk tassel.

Infant's Knit Shirt.—The material required is one ounce of white split wool, or of Saxony yarn. It is knit upon two gutta percha needles two sizes larger than ordinary steel needles—the latter may be used if it is desired to have the work very close and fine before washing.

Set up eighty-one stitches and knit one plain row. The next row begins by narrowing one stitch; knit three stitches, then throw in the thread and knit one —this is to widen—throw in the thread again and knit one, then knit two and take, on the right hand needle, one stitch from the left. Now narrow one and bind; that is, drop over the stitch you have just narrowed, the one you took from the left hand needle.

Repeat all of the above to the end of this row, then knit across with one plain row and back with another, preserving the right and wrong sides of these two rows, which complete the scallop. Repeat the three last mentioned rows until a piece of sufficient length is knit. Knit another of the same size and join the two at the side edges to within a few inches of the top, which leave open for inserting sleeves.

The sleeves are knit with a row of scallops at the lower edge, and are ribbed for the top part. Finish the neck, after sewing in the sleeves, with a crotched scallop and insert a ribbon to draw it into shape.

Double Knit Scarf.—Two colours, blue and white. Cast on thirty-six stitches in blue, first row; bring the wool forward, slip one, pass the wool back, knit one; repeat to end of the row. Each suceeding row is the same, observing that the knit stitch always comes under the slip stitch. It will require seven rows of blue, seven of white, seven of blue, thirty-eight of white, seven of blue, seven of white, seven of blue. Cast off and draw up the ends. Finish with blue and white tassels.

To Knit Diamond Edging.—Cast upon one knitting needle nine stitches. Knit three stitches, narrow once, put thread over once, narrow, thread over, knit one stitch, thread over, knit one. Knit back seam. Knit two stitches, narrow, thread over once, narrow, thread over once, knit three stitches, thread over once, knit one. Knit back seam. Knit one, narrow, thread over once, narrow, thread over, knit five stitches, thread over, knit one. Knit back seam or plain. Knit three stitches, thread over once, narrow, thread over once, narrow, knit one stitch, narrow thread over once, narrow. Knit plain or seam. Knit four stitches, thread over once, narrow three stitches together, thread over once, narrow. Knit back seam or plain. Knit five stitches, thread over once, narrow three stitches together, thread over once, narrow. Knit seam back if you want a right or wrong side.

KNIT SPREAD FOR A LIGHT STAND.—Cast on wooden needles one hundred and twenty-seven stitches. Take off the first stitch, calling it one, thread over once, narrow two stitches together, which counts three, thread up over once, knit two which count three, and so on clear across. Seam back plain. Knit back plain. Seam back on the wrong side, making three times between the eyelets. The coarser the needles and yarn the more showy the work.

TO CROCHET HOUSE SLIPPERS.—Materials required is three ounces double wool. Commence the slipper at the toe. Make three chain stitches, then knit back with a single crochet, commencing in the very last chain made. Into the centre one of the three chains put three single crochets for widening. This row contains five single crochet stitches, and the entire front of the slipper consists of successive rows of single crochet, knit from right to left, each row commencing on the last stitch of the preceding, always knitting three single crochet in the centre to continue the widening. The size of the front must be ascertained by measurement upon the foot, or cork insole which it is designed to use. When large enough commence another row, knitting ten stitches: turn and knit back on these ten. This is the beginning of back part of slipper. Narrow one stitch at the top of next row, and after a plain row, narrow again at the top. You now have eight stitches, Continue knitting from right to left six, eight or ten rows according to the size desired, Then from this point, until the middle of the back of the heel is reached, widen—by putting two stitches into one—every other row at the top. This completes one-half of the back. Break the worsted, take up ten stitches on the opposite side of the front, and proceed with this last half as with the first, joining the two at the centre of the heel with a row of single crochet. The slipper thus far presents a ribbed appearance caused by knitting each stitch into the outer side of those of the preceding row. Be careful to do this.

How to put on Slipper Sole.—Make the upper enough shorter than the sole to require stretching when it is sewed on. Finish the top edge of the crocheted part with a scallop, first making a row of double crochet (long stitches) with two chain between each two stitches. Sew this upper in button hole stitch with strong silk to a cork insole of the required size. A more durable way, however, is to stitch around the sole a piece of fine alpaca braid of the exact shade of the zephr used; then sew on the upper and finish by neatly binding to it the free edge of the braid. The finishing touches to the entire slipper consists in inserting a rubber cord just below the scallop for the purpose of holding it close around the foot; also in the same part insert a worsted cord furnished with small balls at the ends and tied in a bow knot in front of the slipper. To invalids and for tender feet these slippers are a special comfort, being warm and easy as a stocking.

Greek Crochet Cap.—This is made of coarse chenille. Begin at the top with a chain of six or eight stitches; unite the ends and work in rows round and round, increasing a sufficient number of stitches in each row to keep the work flat, until it is about eight inches in diameter.

The sides may be worked in open crochet, introducing a few plain lines of black and gold between each two rows of open crochet. The best colours for a cap in chenille are black and gold—dark blue, black and gold, or claret, black and gold.

How to Knit Suspenders.—Material for one pair of suspenders: Two balls of fancy coloured wrapping twine, such as druggists use for tying up parcels; two large sized knitting needles, such as are used for knitting woollen hose. Cast on twenty stitches, knit the first stitch, turn the thread around as if to seam, take off the next stitch without knitting, turn back the thread, knit the next, take off the next the same as before, continue to knit in this manner until you have a strip two inches long; this is for the narrow end which slides into the buckle.

For the wider part knit the first stitch as before bring the thread round, take off the stitch the same as if seaming, then instead of turning the thread back bring it over the needle, you will then have a stitch and loop, both resting on the knitting needle. Knit the next stitch, take off the next the same as before. Thus do until all are knit, you will then have a single and double stitch for every alternate one. If the buckles are wide knit all one width.

In knitting the next time across, take off the single stitch and knit the double one. Every time the single stitch is taken off, the thread must be passed over the needle to make a double one of it. That is all. Knit the required length, then knit the end the same as the beginning, only adding a button hole; this is done by dividing the stitches and knitting up half, then dropping down the thread and knitting up the other half; then knit six or eight times across and bind off.

The two narrow strips which fasten to the buckle holding the suspender and also attached to the pants, can be made of leather or knit like the ends of the suspender, just as you choose. A pair of buckles taken from an old pair of suspenders will complete the list of materials; fasten them properly and they are ready for use.

Knit Rag Mats.—Almost every family have a receptacle where cast off garments are allowed to accumulate, which are too good for the rag bag, and not profitable to be made over into articles of wearing apparel. These may be made into sightly and useful mats.

Select a goodly quantity of gay colours; wash thoroughly, and when dry cut or tear into strips about a half inch wide; if cut on the bias the rags work all the better, for then when knit the strips look like plush. The more pains you take in cutting or sewing the nicer your work will look when finished.

You will want a pair of wooden needles three-eighths of a yard long and as large around as a common pipe stem; they must be very smooth or else your stitches will catch. Before beginning to knit the rags you will want to decide what shape you wish for the mat.

If you wish a large, black diamond to form the centre piece, cast on three stitches; knit "garter fashion;" widen at the ends of the needle every time you knit across until you have thirty stitches; now knit plain three or four times across, then commence and narrow at the end of the needle until you are reduced to three stitches; bind off, and thus you have the starting point. Now cast on seven or eight stitches, knit a strip long enough to reach around the centre piece, bind off sew together and sew on around the centre piece.

By laying your work on a table or stand when sewing, you will get it much truer. You will get a right curve to your strip by knitting the outside stitch every time you commence, on one side only. The second piece may be made from green delaine, the next strip (like the first, only a little longer), hit or miss rags—very bright colours—or very short pieces sewed together.

Next strip green delaine, next hit or miss, divided by rags of a bright maroon colour, forming a very pleasing contrast; the last row may be made of green delaine knit with a scalloped edge, bordered by a crocheted edge of scarlet yarn or any other colours to please.

A Knitted Cape.—Use three-ply fleecy wool, and number twelve needles. Put on thirty-five stitches; knit eight times across straight, then thirty-six times across, increasing one stitch on one end each row. Decrease one stitch for twenty-one rows on the straight side to form the back part of the neck, still increasing on the other side. Then knit twelve turns quite straight—the centre of these twelve turns is the centre of the pelerine, and the other side must be knitted in reverse.

To Knit a Tidy.—Cast upon very coarse needles ninety-two stitches, knit across plain like the heel of a stocking, seam back, knit across plain as before, then seam back. Commence, narrow eight stitches into four; put your thread up over once, making a loop stitch hole, and knit one stitch, thread over, knit one, thread over; knit one, thread over; knit one, thread over; knit one, thread over; knit one, thread over; knit one, thread over; narrow eight times, thread over, knit one, thread over; knit one, thread over; knit one, thread over; knit one, thread over; knit one, thread over; knit one, thread over; knit one, thread over; knit one, thread over; narrow eight times as above on the right side, across, seam back, knit across plain, seam back, making three times across between eyelets according to rule. You can have it as long or as short as you choose. I have one for a common lounge made of carpet warp. Trim with fringe or not, as you think best.

KITCHEN AND TABLE WARE.

Fastening on Knife Handles.—Set the handle upon end, fill the cavity with pulverized resin, then warm the small parts of the knife or fork and insert it slowly, press it down firmly and hold it in right position until the resin cools enough to set. As resin is not soluble in water, the knives are not loosened. Glue or any other cementing material soluble in water is not available. Glue may be made to resist water, however, by putting two ounces of it in a pint of skimmed milk, and evaporating the mixture to the proper consistency for use. The following is a cement I prefer to resin, but is not so cheap and handy : One-fourth pound of colophony—which may be found at almost any drug store—two ounces of sulphur melted together ; mould into bars, and when wanted to use, powder sufficient quantity for use and mix with half part of iron filings or fine brick dust, then use same as the resin. This makes a very fine and lasting cement.

Discoloured Ivory Knife Handles.—Where ivory handles have become yellow, they may be restored by soaking a few hours in a watery solution of sulphurous acid. The acid in a gaseous state should not be used, as it will be likely to make the handles crack.

Charcoal for Table Knives. Powdered charcoal is a good thing to use in scouring knives and forks, as it will not wear them out nearly so fast as brick dust, which is most commonly used. A small, fine-grained grindstone would be a good thing to have in the kitchen; it would whirl the grime off the knives quickly, but the forks would have to be scoured by the usual process.

To Clean Rusty Table Knives. Where the knives have got rusty by neglect, rub the blades over thoroughly with sweet oil; allow this to remain as long as possible, a day or so at least, then rub the steel with finely powdered, unslaked lime or pumice stone. To keep them from rusting when not in daily use, dry them thoroughly and roll up in a flannel cloth, and keep them in a dry place.

To Cleanse Silver.—Clean silver with hot water, followed by a solution of equal parts of spirits of ammonia and spirits of turpentine; and after this, if necessary, prepared chalk, whiting, magnesia or rouge.

Another Method.—It is claimed that water in which potatoes have been boiled exercises a remarkable cleaning influence upon silverware of all kinds, especially spoons that have become blackened by eggs. Even delicately chased and engraved articles can, it is said, be made bright by this method, even better than by the use of the ordinary polishing powder, which is apt to settle in the depressions, requiring particular care in its removal.

To Clean Silver Plate.—In the first place, every particle of grease must be removed by means of hot water, in which is dissolved a small bit of cooking soda; it must then be thoroughly rinsed in clear, warm water and wiped with a dry, soft towel, or a piece of wash leather. It may then be rubbed with fine whiting with a bit of flannel or chamois skin; if there are stains on the plate, the whiting should be rubbed on, mixed with water or a little sweet oil, and allowed to remain several hours; but if the silver is merely tarnished, it will be sufficient to give it a dry polish by using the whiting of very fine plate powder, dry, and polishing by a soft wash leather, cleansing the chased portions with a soft bristle brush. All plate and silver in common use should be cleaned at least once a week, but too severe rubbing will soon wear out even the celebrated Sheffield plate. Plate should be well protected in a dry closet or drawer; a box lined with flannel is the best receptacle. The practice of leaving silver exposed on the sideboard is injurious to the plate, from the fact that there exists in the air a portion of sulphuretted hydrogen gas, which turns the silver black. The habit of melting off spermaceti from candle sticks, by placing them near the fire, is destructive; if moderately hot water and soda will not remove the grease, a little alcohol will.

Cleaning Solid Silver.—Silver is most susceptible of spotting and discolouration by sea air, the human perspiration, the presence of sulphuretted hydrogen (as seen in an egg spoon left uncleaned), and by the contact of mice; the latter cause has irretrievably injured some new plated ware, never used, but left on a sideboard accessible to these little vermin. It is the practice of the East Indian jewellers never to touch silver and gold with any abrasive substance. The most delicate filigree work and wire constructions of silver are rendered snowy white by their simple manipulation. They cut some juicy lemons in slices; with these rub any large silver or plated article briskly, and leave it hidden by the slices in a pan for a few hours. For delicate jewellry they cut a large lime or lemon nearly in half and insert the ornament; they then close up the halves tightly and put it away for a few hours. The articles are then to be removed, rinsed in two or three waters, and consigned to a saucepan of nearly boiling soap suds; well stirred about, taken out, again brushed, rinsed and finally dried on a metal plate over hot water, finishing the process by a little rub of wash leather (if smooth work).

To Take Stains out of Silver Plate.—Steep the plate in soap lyes for the space of four hours; then cover it over with whiting, wet with vinegar, so that it may stick thick upon it, and dry it by the fire; after which rub off the whiting, and pass it over with dry bran, and the spots will not only disappear, but the plate will look exceedingly bright.

Keeping Tin Ware Bright.—It is a very good plan every week to gather up the tin ware that is in daily use, and wash it well with hot suds and a woollen cloth in the tub or boiler. The brightness thus given to it is nicer than from scouring; besides, the ware is not worn out, and the seams about the handle and spouts can be made very clean. Never use lye to clean tin, it will soon spoil it. Kerosene and powdered lime, whiting or wood ashes will scour tin with little trouble. Do not scour your tin dishes unless you have some stain that cannot be removed by flannel and soap. Scouring injures them by wearing away the coating and exposing the iron.

Convenient Dish Pan.—A housewife writes: "Let me tell you how I have my dish pan made, and I believe others will follow my plan—they certainly will if they know how much more convenient it is than the old style. Instead of having it round it is made oblong, being about fifteen inches wide at the top by twenty-four long, narrower at the bottom of course, the same as common pans are made. In the centre there is a tin partition, soldered in firmly at the ends and bottom, so that I have two compartments, one for washing the dishes in and the other for rinsing them in. Such a pan as this is not unhandy to use, and saves the trouble of keeping a rinsing dish, and what is more advantageous, it prevents the liability of neglecting to rinse the dishes at all when they come out of the wash water. This neglect is very common, much more so than it should be. A meat plate cannot be made clean by simply washing it in greasy dish water and wiping it with a damp cloth.

To mend Tin Ware.—It may be done with putty. It is very easily applied and it is much better than to throw articles away. Put it on the outside; let it thoroughly dry, and you will never have to mend that place again.

Japanning Old Tea Trays.—First clean them thoroughly with soap and water and a little rotten stone; then dry them by wiping and exposure to the fire. Now get some good copal varnish; mix with it some bronze powder and apply with a brush to the denuded parts. After which set the tea tray in a very hot oven until the varnish is dry. Two coats will, it is said, make it equal to new.

To Clean Preserve Jars.—Sweetmeat jars or bottles may be cleaned without scraping them, by pouring in the jars hot water and a teaspoonful or two of pearlash. The contents which remain sticking to the sides and bottom of the jar will be disengaged by the pearlash and float loose in the water. Wash kettles the same way, or other vessels which you wish to purify or clear from grease. Strong lye poured off clear from good hickory ashes will answer nearly as well for the same purpose, and for kegs, buckets and other large cooking utensils, lye from wood ashes may always be used.

To Clean Jars and Buckets.—A convenient method of cleansing a jar, bucket, tub or barrel, is to place a small quantity of lime on the bottom, and then slaking it with hot water in which as much salt has been dissolved as it will take up. It will purify it like a charm. Cover vessel to keep steam in.

Sweetening Stone Jars.—A housekeeper writes: "Having some stone jars in which lard had been packed until they became unfit for use, I made them perfectly sweet by packing them full of fresh earth, and letting it remain two or three weeks. This is an experiment with me, and I suspect it would be equally effective in any case of foul earthen or stone ware."

Mending Broken Dishes.—As soon as a plate gets cracked part way across, crack it the rest of the way; don't wash it after breaking, but cement it at once. Pie or baking plates that have been used for even a few times after being cracked, cannot be as successfully mended as those freshly broken, for cementing materials will not adhere to greasy surfaces with much tenacity.

White Lead for mending Dishes.—Prepared white lead can be purchased in pound cans and kept always ready for use. (After the can has been opened keep a little linseed oil on the surface to prevent the lead hardening). Paint both edges of the parts with the lead mixed to a consistency little thicker than it usually is when spread with a brush; bind the article closely, and allow it to stand until perfectly dry before putting into use again. Nothing is gained by setting the repaired article where it is hot, for the power of the cement is greatly lessened by this operation. When purchasing the paint, be sure and get a pure article of lead, for Spanish whiting will not answer the purpose. Lead freshly mixed is not good: the material becomes more adhesive by standing a while, both as a cement and as a paint.

Cementing Dishes with Milk.—The old plan of boiling broken dishes in milk is a very quick way of mending, and I have seen those made permanently strong by simply being tied up, soaked in warm, freshly drawn milk and dried; what I mean by warm, freshly drawn milk is that containing the animal heat. A glutinous property, doubtless caseine, penetrates the fracture and congeals with a firmness very tenacious.

To mend China.—Mix together equal parts of fine glue, whites of eggs and white lead, and with it anoint the edges of the articles to be mended; press them together, and when hard and dry scrape off as much of the cement as sticks about the joint. The juice of garlic is another good cement, and leaves no mark where it has been used.

Another Method.—Take a very thick solution of gum arabic and stir it into plaster of Paris until the mixture is of proper consistency. Apply it with a brush to the fractured edges of the chinaware and stick them together. In a few days it will be impossible to break the articles in the same place. The whiteness of the cement renders it doubly valuable.

Isinglass cement for Dishes.—Take isinglass, one ounce; distilled water six ounces; alcohol one and one half-ounces; warm in a water bath till dissolved, and strain the solution. Add to the clear solution, while hot, a milky emulsion of gum ammoniac, one half ounce, alcoholic solution of gum mastic, five drams; this possesses great adhesive qualities.

Fire-proof Cement for Dishes.—To make a fire and water-proof cement to be used on broken ware, take a teacupful each of vinegar and milk, mix, separate the curd and mix the whey with whites of two or three eggs; beat this mixture together, then add enough common or quick lime to make the cement of proper consistency. A less or greater quantity can be made as required. It will be found good.

Sugar Cement for Dishes.—Starch, one ounce; white sugar, four ounces, added to a solution of one ounce of gum arabic in hot water. The mixture is boiled until the starch is cooked.

Waterglass Cement for Dishes.—Waterglass is said to make a good material for mending either china, earthenware or glass.

To Clean Porcelain.—A very good material for cleaning either porcelain or glassware is fuller's earth, but it must be beaten into a fine powder and carefully cleared from all rough or hard particles. If hard particles are left in they will endanger the polish of the brilliant surface.

Use for Old Dishes.—Old dishes, not greasy, I have found useful and pretty to hold nice green growing things—say a sod of opening violets—which will grow and bloom and get greener and prettier the longer it stands on your window sill; or a mat of door yard ivy, or myrtle, or anything that trails or tangles, and is beautiful.

To Pack Crockery.—As a rule, when packing crockery in a box or barrel, put all of the heavy pieces at the bottom, then mark the box that it may be kept right side up. Use straw or hay to pack them in, and if they are to be sent a long way and are heavy, the hay or straw should be a little damp, which will prevent them slipping about. Use plenty of this material, and keep the ware pressed closely together. At top, bottom and on the sides, there should be a good thickness of new straw. New straw is more elastic than old.

LAMPS.

To Clean a Lamp Chimney.—Most people in cleaning lamp chimneys either use a brush made of bristles twisted into a wire, or a rag on the point of scissors. Both of these are bad; for without great care, the wire or scissors will scratch the glass as a diamond does, which under the expansive power of heat, soon breaks, as all scratched glass will. If you want a neat little thing that costs nothing, and will save half your glass, tie a piece of soft sponge the size of your chimney to a pine-stick.

ANOTHER METHOD.—Hold a linen cloth against one end of the chimney and place the other end at your mouth; breathe on it until it is covered inside with moisture: push the cloth into the chimney with a smooth, slender stick, and rub it around until the moisture is absorbed; repeat the process and breathe on the outer surface; also rub this with a cloth until dry, and you have a clean, bright chimney. Soft newspaper will take the place of a linen cloth. Do not use cotton cloth on glassware.

To Test Lamp Chimneys.—Every person who has any experience with lamp chimneys is aware of the want of uniformity in the length of time they will stand use. Some will stand for months, while others, apparently as sound and good, will break after a short use, with no apparent cause. The great cause of their being brittle and breaking so easily lies in the material they are made from There is shoddy in glass as well as in cloth. Cheapness being the order of the day, a great many manufactories make chimneys from cheap materials. The uninitiated may tell the different qualities of glass by ringing it; the vibrations of the lead glass chimneys have a sweet, bell-like sound, while the lime glass has a short, harsh sound.

To Toughen Lamp Chimneys.—A correspondent says when you buy a new lamp chimney put it in a vessel of cold water, set it on a stove and let it boil. You can never break that chimney unless you throw a flat-iron at it.

To Ornament a Lamp Shade.—A pretty effect may be produced by pasting with gum autumn leaves and ferns on the inside of porcelain shades, particularly those belonging to the student lamp. They should be the brightest, smallest specimens, and may be arranged either in clusters or a wreath all the way around. They should be prepared in the usual way, pressed or ironed. They will remain bright two or three months, and when faded can easily be soaked off with warm water and replaced with others.

Bad Lamp Wick.—The unsatisfactory light frequently given by kerosene lamps is often due to the wick. The filtering of several quarts of oil through a wick which holds every particle of dirt in it, must necessarily gradually obstruct the pores of the wick. Consequently, although a wick may be long enough to last some time, its conducting power may be so impaired that good light cannot be obtained. The only remedy is a new wick. Burners are often thrown aside as worthless, on account of the difficulty of raising and lowering the wick, when the fault is almost invariably with the wick.

To Mend Lamps.—Boil three parts of resin with one part of caustic soda and five parts water, which mix with one-half its weight of plaster of Paris. Zinc white or precipitated chalk may be substituted for plaster of Paris, but the material will be longer hardening.

To Prevent Lamps Exploding.—The cause of explosion has usually been attributed to allowing the oil to get low in the lamp, the vacuum filling with gas. Another cause assigned is, that explosions sometimes take place through neglecting to cut off the charred portion of the wick when the lamp is filled. Observation will show that in a few days' use the wick becomes like charcoal in composition considerably below the top of the tube, and after the lamp has burned a short time the heated tube fires all of the charred portion of the wick inside, and that sets the oil on fire below; this may be prevented by cutting off a sufficient portion of the charred wick each day after using the lamp. Thus it appears that all housewives have to do to make the use of coal oil lamps as safe as any other, is to keep them full; fill them by daylight, and have the wicks well trimmed. It is claimed also that a tablespoonful of salt in the oil of a lamp will render it non-explosive.

To Fill a Lamp.—One of the rules of the household should be that the lamps be filled during the daytime. If a lamp *must* be filled at night, for any reason, don't lay the lighted burner over on one side of the lamp while pouring in the oil, but extinguish it, or take it out entirely, and remove the lamp at least three feet from any light or fire while filling it.

Safeguard for Lamps—One great danger in the use of coal oil lamps lies in the breakages that frequently occur from dropping or upsetting them. The lamp that is carried about the house by servants and children should be filled with cotton. After it is stuffed lightly it will receive only about one-half the quantity of oil which it would if the cotton was not put in. If any accident happens, the oil cannot spill or flow about, but being absorbed in the cotton, it burns all in one place. The wick embedded in the cotton will absorb the oil as readily as if lying in the clear fluid.

How to Test Lamp Oil.—Take a common quart bowl fill it one-third full of boiling water; now add cold water, a little at a time, until a thermometer in it indicates a temperature of one hundred and ten degrees Fahrenheit. Pour a little oil on to the water. It will float and may be touched with a match or lighted paper. If it takes fire at the above temperature don't use it.

LEATHER.

To Restore Patent Leather.—Take one pint of raw linseed oil, four ounces of cider vinegar, two ounces of spirits of wine, one ounce of butter of antimony, half an ounce of spirits of hartshorn, half an ounce of camphor, and half an ounce of lavender. Shake them well together, and they are ready for use. Apply this with a soft brush, and rub it with cotton batting until it is dry.

To Fasten Leather to Metal.—It is said that leather may be affixed to metal so that it will split before it can be torn off, by means of the following composition: A quantity of nut galls reduced to powder is dissolved in eight parts of distilled water, and after remaining for six hours, is filtered through a cloth. At the same time take a small quantity of water and add it to one part (by weight) of glue, which is to be held in solution for twenty-four hours. The first is to be applied to the leather, the latter to the metal, which should first be roughened and heated. The leather is then laid upon the metal and dried under pressure.

Leather Pump Packing.—Leather pump packing requiring to be very tight, for small work, should not be more than one-thirty-second inch thick, and not be bent up round the bore or sides of the barrel more than one-sixteenth inch:

To Blacken Leather—Take two pounds of bark of elder, and the same quantity of the filings of rusty iron; steep them in two gallons of river water, and put them in a cask or vessel closely stopped. After it has thus stood two months, add to the liquid, when well pressed out, one pound of powdered nut-galls, and a quarter of a pound of copperas; and then, after stirring it over a good fire, press out the liquid, with which the leather is to be three or four times brushed over, when it becomes of an excellent and durable black.

Water-Proof Leather Blacking.—Take a quarter pound of tallow, one quarter pound of beeswax, one quarter pound of resin, one pint of tanner's oil, and lampblack to colour.

Bright Leather Blacking.—Take four ounces of ivory-black, three ounces of the coarsest sugar, a tablespoonful of sweet oil, and a pint of small beer; mix them gradually, cold.

To Polish Enamelled Leather.—Two pints of the best cream, one pint of linseed oil; make them each lukewarm, and then mix them well together. Having previously cleaned the leather from dirt, rub it over with a sponge dipped in the mixture; then rub it with a soft dry cloth until a brilliant polish is produced.

German Liquid Leather Polish.—Dissolve three and one-half ounces of shellac in half a pint of alcohol. Rub smooth twenty-five grains of lampblack with six drams of cod liver oil, and mix. A few drops are to be applied to the leather with a sponge.

To Restore Morocco Leather.—The lustre of morocco leather is restored by varnishing with white of egg.

Patent Leather Polish.—A polish for patent leather, which the *Chemist and Druggist* pronounces to be a good thing, is made by the mixing of the whites of two eggs, one tablespoonful of alcohol, two large lumps of sugar, as much finely powdered ivory black as may be required to make it black enough and of the right consistency. Lay it on lightly with a soft sponge, and rub gently with a soft cloth.

Vienna Leather Polish.—A fine polish is composed of purified lampblack and turpentine, in which a small quantity of asphaltum has been dissolved. These articles must be well mixed, and then added to thin shellac varnish, the whole being thoroughly stirred; care must be taken not to use too much turpentine, as it will injure the lustre of the polish.

Ivory Black Leather Polish.—Mix ivory black with copal varnish. The best method of mixing is to rub the black with a small quantity of the varnish until it is all moistened, and then add sufficient quantity of the varnish to reduce it to the proper consistency. This black, being elastic, can be used upon collars as well as other parts of the harness, and as a renovator for carriage tops, etc.

Gloss for Leather.—Professor Bottger states that a fine golden gloss may be imparted to leather by brushing it over with a broad soft brush dipped in a concentrated solution of resin in an alcohol solution of shellac.

Polish for Old Leather.—Take two parts of good glue and soak in tepid water until it is thoroughly softened, then add three parts of castile soap dissolve in warm water, then add five gills of water and two gills of brandy or common spirits, rubbing it until it becomes smooth; stir this into the mass, and afterwards stir in two parts of wheat flour mixed smooth in cold water. The mixture is then put over a moderate fire and allowed to steam off a little, but not to boil, stirring it well over the fire.

It can be used immediately, or made up into small cakes which can be dissolved at any time in a little water or beer. It can be put on with a brush, a thin coat only being required, and afterwards rubbing it with a linen or silk cloth. It will restore old dash boards or leather tops, where the enamel is not off.

MARBLE.

To Polish.—Rub thoroughly with a linen cloth wrapped around a block that has been wet with oxide of zinc, sometimes called "putty powder." This will also polish alabaster or common stone, providing the latter is hard enough to take a polish.

To Dress Over a Mantel.—It should first be thoroughly cleaned by coating with lime and soda mixed into a paste with water. Keep this application wet for twenty-four hours, then rub off with cloths and apply the oxide of zinc paste; but keep it constantly wet. The preparation answers a very good purpose for removing scratches in show cases, or plate glass, wherever brought into contact with hard substances.

Iron Rust on.—This can usually be removed by rubbing with lemon juice. Almost all other stains may be taken off by mixing one grain of finely powdered chalk, one of pumice stone, and two ounces of common soda. Sift these together through a fine sieve, and mix with water. When thoroughly mixed, rub this mixture over the stains faithfully, and they will disappear. Wash the marble after this with soap and water, dry and polish with a chamois skin, and the marble will look like new.

To take out Stains.—A small quantity of diluted vitriol will take stains out of marble. Wet the spots with the acid, and in a few minutes rub briskly with a soft linen cloth till they disappear.

Artificial.—It is said that a nice quality of artificial marble may be made by mixing plaster of Paris in a solution of alum; bake in oven and grind to a powder; it may then be mixed with water and formed into any shape. It will bear a high polish.

Cement Filling.—Take of beeswax two pounds, and of resin one pound; melt them and add one and one-half pound of the same kind of matter, powdered, as the body to be cemented is composed of, strewing it into the melted mixture and stirring them well together, and afterwards kneading the mass in water that the powder may be thoroughly incorporated with the wax and resin.

The proportion of the powdered matter may be varied where required, in order to bring the cement nearer the colour of the body on which it is to be employed. This cement must be heated when applied, as also the parts of the subject to be cemented together, and care must be taken, likewise, that they may be thoroughly dry.

Where large cracks are to be filled before the cement is hardened, rub into the seam dust of the same material, so as to have a uniform surface. This may be used upon alabaster and different kinds of stone.

MATS.

Crocheted Mats.—A pair of them can be knit in a single evening. Begin by making a plain centre consisting of successive rounds of dc. (double crochet, long stitches), separated by one ch. (chain stitch), widening sufficiently to keep it flat. For the first round of the border knit four sc. (single crochet), then seven ch., skipping three stitches in the last round of centre; repeat the four sc. and seven ch. until this round is completed. Second round of border; knit four dc. over the four in first round, then into each of the seven ch. make a dc.; separate these dc. stitches by one ch. Repeat until second round is completed.

The next and third round consists entirely of treble crochet stitches. One into each stitch of the second round. Fourth round, make seven chain and fasten by a sc. into each stitch of the preceding round.

The centre of this mat is of white, single wool; border of two shades of light green or coral single wool. The border is very full and of feathery appearance. A mat of ordinary size requires a half ounce of white and one and a half of coloured worsted. It should be crocheted very loosely, especially the last row, consisting of chain stitches. Upon the observance of this depends the prettiness of the mat.

Washstand Mat.—To make these, crochet a centre of No. 10 German tidy cotton, consisting of solid rows of double crochet (long stitches), widening sufficiently to keep it flat and crocheting tightly. Make the centre the exact size of the bottom of the pitcher, bowl or toilet piece for which it is designed.

Commence the border by crocheting two double crochet, one chain and then another double crochet, through the back vein of a single stitch of the preceding row. This forms a cluster, which knit again after skipping three stitches, and so continue until the row is completed.

The second row consists of clusters of *three* double crochet, one chain and then one double crochet, *all* passed through the chain stitches of the first row. The first and last row is knit the same as the second, except making *four* double crochet before the chain.

If these mats are used upon marble, a border of scarlet worsted is particularly pretty. The scarlet will retain all its brightness in washing if a little washing soda is used in the first water and the mat immediately rinsed in cold water.

Muslin Toilet Mat.—A pretty and very quickly made toilet mat of dotted swiss may be produced in the following manner: Get swiss in which the dots are about an inch and a quarter apart, and having cut a square piece two inches smaller all round than the size you desire the finished mat, embroider stars on every other square in the swiss designed by the dots in any colour of single wool matching the furnishing of the room. The stars are simply threads of the wool crossing each other in what is known as the double cross stitch.

To finish the edge of the mat cut a ruffle three and one-half inches wide, fold a narrow hem on each edge and fasten it in place by taking stitches "over and over" with the worsted; gather the ruffle also with worsted, leaving a narrow heading, and sew it around the edge of the mat which is to be laid on a foundation piece of white paper cambric.

Double Ruffle Mat.—Mats of Indian muslin, which washes so nicely, are very prettily finished simply with a double ruffle. Cut the ruffles of equal width, sew one on the edge of the mat and the other the width of itself inside this, covering the raw edges with narrow nainsook inserting.

Have the ruffles fluted, and laying the mats over coloured silk, the effect is charming. Indian or book muslin mats trimmed with an inserting and edge of guipure lace, such as is used for curtains, are rather handsomer than the ones just described. The lace should be as cobweb like as possible.

Cheap Foot Mat.—A lady writer says that a very inexpensive foot mat may be made of a plain coloured delaine dress, no matter how old—or if you want two colours take two dresses, and arrange the shades to suit yourself—cut bias strips two inches wide, fringe the edges with a large pin—you can do it very fast—run a thread through the middle, draw it up together almost as tight and close as you can, then sew this on to some firm foundation. You want to commence in the middle and go round and round.

It takes a great deal of material, but that doesn't matter, for it can be made of what is good for nothing else. If you haven't enough to make the whole mat in this way, cut a plain centre piece of black cloth, or something which will last, and sew the fringed gathers around it. After it is sewed on trim it evenly and it will have the appearance of a chenille foot mat.

Another way is to take an old pair of black pants —or any other plain colour will do, of course—cut about a dozen yards of inch wide strips; then cut some red, or bright coloured flannel the same way; if you haven't any old, you can get coarse scarlet flannel for fifteen pence a yard, plenty good enough, and one yard will make two mats.

Prepare some good calico, or something firm for the foundation; then cut a piece of black two fingers wide and five fingers long, and baste it in the centre of the foundation. Lap the red on this piece, the right sides together; run it across one side with coarse carpet thread; cut off the end; roll it over and baste it down "log cabin" fashion; put the red on again, laying it so it will cross the end you cut; run it, turn and baste again. Go clear around the black centre with the red, then with the black alternating, until you have the mat as large as you wish. Those who have made "log cabin" bedquilts will not need all these instructions.

For the edge, put on a plain piece of black about an inch and a half wide, and pink it if you have an iron. If you have not, take either black or red three inches wide, cut little slits an inch and a half long every half finger; take each piece up separately, double the corners in, run it across, turn it, press it down well, and you will have even points all around, which will look better than pinking.

If you choose, you can make these mats octagon shape by cutting the centre piece that shape, and if you want it to look extra nice, embroider a dog, a bird, a monkey or a large initial in the centre of the black with gray worsted. You will have to get this stamped first, unless you have considerable ingenuity.

Wall Protecting Mat.—Get a yard of fine cord Marseilles. Have your initial stamped in the centre, also appropriate designs in the corners for braiding. Braid the whole with the linen star braid, and finish the outer edges by sewing on britannia frilling. This makes a neat and pretty protector for the wall back of a washstand.

A set of pretty mats for the stand can be made of the same material. Cut circular mats of the size required, braid the initial upon the centre of each; line them and finish the edges with a scallop in button hole stitch.

Washing Toilet Mats.—In washing toilet mats, they should not be starched, as it will cause them to fasten to the bottom of bowl or pitcher, so that they will be displaced whenever either of those articles are moved.

Corn Husk Mats.—Select the second layer of husks, rejecting the brown outside ones. Tear them into strips lengthwise, about an inch or an inch and a half wide. Lay them on the grass or in a tub, and with a broom sprinkle water upon them until damp enough to be pliable.

Begin by making a round bunch of husks about a finger's size, tying the bunch at the base or near the butt ends with a stout string, then divide into thirds and braid flat. When the strand on the left hand side is brought over each time, add one or two husks, leaving the butts projecting half a finger's length. Braid in the tops, and so continue until a strand about twenty feet long has been made. That size will make a good sized step or door mat. Sheep shears will be found most convenient for this work.

Trim off the projecting butts to even length with a pair of shears, then wind and sew the mat with strong twine. The sewing, of course, is done on the under or smooth side. The sewing should be done before the husks are dried, or if dried, should be dampened. If not true enough to please the eye on its brush surface, the mat may be bent and dressed off with the shears, or :—

A rural lady says: Take an inch board of the size desired and bore three-fourth inch holes through it, with the centres two inches apart; into these draw dampened corn husks, and trim off an inch or more long on each side. This mat is good either side up. Anybody can easily make one, and people can keep their boots and shoes clean, much to the gratification of good housekeepers.

How to Wash a Sheepskin Mat.—The first thing to be remembered is, that it must not be washed in too hot water, as that would spoil the colour of the wool and make it quite yellow. Boiled soap must be used in sufficient quantity to clean the skin well, after which it must be thoroughly rinsed in cold water till the whole of the soap is removed. It should not be put into water with much blue in it, but enough should be used to make it a clear white.

The mat may be put in the sun to dry, but care must be taken not to leave it too long, nor to put the skin uppermost, but always the fleecy part, otherwise it will become stiff and will crack.

To prevent all chance of this it must be very frequently shaken while drying, as this is an important part of the process, and is of as much consequence as the washing. If the mat be a coloured one, some ox gall should be mixed with the boiled soap to preserve the dye.

Table Mat.—A fine mat for very hot dishes is made of two circular pieces of heavy brown paper, each covered with scarlet flannel, or white if you prefer. On one side sew porcelain buttons—white centred ones with scarlet borders are the prettiest—in the form of a star or stars, diamonds or squares, with a double row around the edge. Lastly, join the two pieces together by top stitching the edges all around. You may make them also of an oblong form for vegetable dishes or meat platters.

Mat for Matches.—Cut sheets of sand paper in circular and octagonal shapes, fasten upon pasteboard, and bind with bright coloured braids. A ring should then be attached to each, and the whole hung near the match safe for use whenever a match is lighted. The unsightly marks that disfigure many walls may, by this inexpensive and simple arrangment, be entirely prevented. There should be one in every room in the house.

METALS.

To Clean Rusty Knives.—Where the knives have rusted by neglect, rub the blades over thoroughly with sweet oil; allow this to remain as long as possible, a day or so at least, then rub the steel with leather coated with finely powdered unslaked lime or pumice stone. To keep them from rusting when not in daily use, dry them thoroughly, and roll up in a flannel cloth and keep it in a dry place.

To Remove Iron Rust.—By allowing articles coated with red iron rust to remain a short time in kerosene oil, the rust can be readily removed by afterwards rubbing for a few minutes with cork.

To Clean Rusty Flat Irons.—Have a piece of yellow beeswax tied in a coarse cloth. When the iron is almost hot enough to use, but not quite, rub it quickly with the beeswax, and then with a clean coarse cloth. This will remove it entirely, unless the rust has been upon the iron long enough to corrode and eat into the polished surface. Fine glass paper, made after the manner of sand paper, is good for removing rust from iron or steel.

To Prevent Steel Rusting.—A simple way of preventing the oxidation of polished steel goods is to dust them over with quicklime. When articles are required to be preserved for many months (such as polished steel grates), strips of paper freely covered with powdered lime are to be wrapped around the bars; or they may be placed in cases and interstices filled up with quicklime. Pianoforte wires and small goods may be preserved in the same way; or:—

Mix with fat oil varnish four-fifths of well rectified spirits of turpentine. Apply this varnish with a sponge, and the articles will retain their metallic brilliancy, and not be liable to rust; or rub over the surface a mixture formed by melting together equal parts, by weight, of paraffine and beeswax.

To Renew Rusty Steelyards.—If the figures or marks on scale or steelyards get obscured by rust, rub them over with fine Bristol brick dust and flannel. The figures will come out bright as new.

To Prevent Iron Rusting.—Melt fresh mutton suet; smear over the irons with it while hot; then dust it well with unslaked lime, powdered and tied up in muslin. When not used, wrap the irons in baize, and keep them in a dry place. Use no oil on them at any time, except salad oil; or:—

Moderately heated benzine dissolves half its weight of wax; and if this solution be carefully applied to the tool with a brush, the evaporation leaves a very adhesive and permanent coating of wax, which will preserve the metal even from the action of acid vapours.

Kerosene for Preventing Rust.—Kerosene applied by means of a moistened cloth to stoves, it is said, will effectually keep them from rusting. It is also an excellent material to apply to all iron utensils used about the premises.

Protecting Polished Surfaces.—Beeswax dissolved in benzine makes an excellent varnish for the protection of highly polished metallic surfaces. It may be applied with a brush; or:—

Rust may be kept from polished iron work by coating the metal with a mixture consisting of copal varnish mixed with as much olive oil as will give it a degree of greasiness, adding thereto nearly as much spirits of turpentine as of varnish; or varnish with wax dissolved in benzine, as given above.

To Clean Rusted Grates.—Where rust has appeared upon grates or other iron fixtures exposed to heat, apply a mixture of tripoli, with half its quantity of sulphur, well ground together and laid on with a piece of soft leather; or emery and oil may be applied with excellent effect. The last named will not only clean, but polish, so that whiting will not be required.

To Make Brass Brilliant.—Beat sal ammoniac into a fine powder, then moisten it with soft water, rubbing it on the ornaments, which must be heated over charcoal and rubbed dry with bran and whiting; or:—

Wash the brass work with roche alum boiled in strong lye, in the proportion of an ounce to a pint. When dry it must be rubbed with fine tripoli. Either of these processes will give to brass the brilliancy of gold.

To Bronze Brass Objects.—First clean and warm the articles, then wash over with a hot solution of ammonium chloride (sal ammonic) then place overnight in a diluted solution of two parts verdigris and one part ammonium chloride in six parts of vinegar. In the morning remove and wash.

To Silver Brass Objects.—Mix three parts of chloride of silver with twenty parts of powdered cream of tartar and fifteen parts of powdered common salt. Moisten a suitable quantity of the mixture with water, and rub it with a piece of blotting paper upon the metallic object, which must be thoroughly clean. The latter is afterwards rubbed with a piece of cotton upon which precipitated chalk is dusted, then washed with water, and polished with a dry cloth; or:—

Take one ounce of aquafortis and dissolve in it, over a moderate fire, one dram of good silver cut small or granulated; this silver being wholly dissolved, take the vessel off the fire and throw into it as much white tartar as is required to absorb all the liquor. The residue is a paste, with which you may rub over any work made of copper, and which will give it the colour of silver.

To Clean Brass.—Rub the surface of the metal with rotten stone and sweet oil, then rub off with a piece of cotton flannel and polish with soft leather. A solution of oxalic acid rubbed over tarnished brass with a cotton rag soon removes the tarnish, rendering the metal bright. The acid must be washed off with water and the brass rubbed with whiting in powder and soft leather.

When acids are employed for removing the oxide from brass, the metal must be thoroughly washed afterwards, or it will tarnish in a few minutes after being exposed to the air. A mixture of muriatic acid and alum dissolved in water imparts a golden hue to brass articles that are steeped in it for a few seconds.

Polish on Brass.—Owing to irregularities of surface, it often happens that difficulty is encountered in putting a good polish on articles of brass or copper. If, however, they be immersed in a bath composed of aquafortis one part, spirits of salt six parts, and water two parts, for a few minutes if small, or twenty or thirty if very large, they will become covered with a kind of black mud, which, on removal by rinsing, will display a beautiful, lustrous under surface. Should the lustre be deemed insufficient, the immersion may be repeated, care being always taken to rinse thoroughly. All articles cleaned in this manner should be dried in hot, dry sawdust.

To Clean Steel Ornaments.—Dip a small brush into some paraffine oil and then into some emery powder—such as is used in the knife machines—and well brush the ornaments, and all the rust will soon come off; polish with a dry leather and duster.

To Protect Polished Steel.—A scientific journal claims that after dipping polished steel in a solution of common soda, one of soda to four of water, atmospheric influences will not change it. To renew it when corroded, brush with a paste composed of one-half ounce cyanide of potassium, half ounce Castile soap, one ounce whiting, and water sufficient to form a paste. The steel should first be washed with a solution of half an ounce cyanide of potassium in two ounces of water.

PAPER.

To make Paper Water-proof.—To make water-proof packing paper, dissolve one and four-fifths pounds of white soap in one quart of water. In another one quart of water dissolve one and four-fifths ounces (Troy), of gum arabic and five and a half ounces of glue. Mix the two solutions, warm them, and soak the paper in the liquid, and pass it between rollers, or simply hang it up to dry; or:—

To make common paper water-proof, prepare a solution of caoutchouc—India rubber in caoutchine, a volatile, oily liquid made from caoutchouc, sold by druggists—plunge into it once or twice unsized paper, and dry it by a gentle heat. It may then be used as writing paper, and will resist all humidity, and small vessels made of it will even contain water.

Water-proof Pasteboard.—The water-proofing of pasteboard may be effected with a mixture of four parts of slaked lime with three parts of skimmed milk and a little alum. As soon as mixed, the pasteboard is brushed over with two successive coatings of the preparation, and thus becomes impervious to water.

Water and fire-proof Paper.—Dissolve eight ounces of alum and three and three-quarter ounces of white soap in four pints of water; in another vessel dissolve two ounces of gum arabic and four ounces of glue in four pints of water. Mix the two solutions and make the mixture hot. Immerse the paper in the mixture, and then hang it up to dry or pass it between cylinders.

The alum, soap, glue, and gum form a sort of artificial covering which protects the surface of the paper from the action of water, and to a certain extent from fire. This paper will be very useful for packages which may be exposed to the inclemency of the weather.

Acid-proof Paper.—Preparation for coating paper to make it resist the action of acids, alkalies, and water: Dissolve caoutchouc -- solution of India rubber —cut into small shreds in a mixture of bisulphide of carbon with six per cent. of absolute alcohol. The solution may be diluted as desired with the mixed solvents.

To Parchmentize.—Paper can be readily converted into vegetable parchment by immersing it for a few minutes in a mixture of two volumes of sulphuric acid and one of water. The acid should be washed off the paper by immersing and slightly agitating it in a large quantity of cold water. The last trace of acid may be removed by finally immersing the paper in water to which a small quantity of ammonia has been added.

To prevent contraction or wrinkling, the paper should be stretched on a frame while yet wet. Paper so prepared is transparent, and can be used for tracing paper; and may also be employed as a very good substitute for sheepskin parchment.

To Renovate Old Manuscripts.—Wash the manuscript in a solution of ferro-cyanide of potassium in clean water.

To Select Wall Paper.—If the room is small a light coloured paper with fine figure is best; if large, a larger figure may be used, but in either case reject all dull, heavy colours, and do not select high coloured or gay designed, but a neat, modest figure. If the house is of old style, low between joints, paper with stripes running up and down should by all means be used; it will give the room an appearance of being larger and higher walled than it really is.

Paper for Polishing.—After a stove has been blackened it can be kept looking very well for a long time by rubbing with paper every morning. Rubbing with paper is a much nicer way of keeping a tea kettle, coffee pot and tea pot bright and clean, than the old way of washing them in suds. Rubbing with paper is also the best way of polishing knives and tinware, after scouring. This saves wetting the knife handles.

If a little flour be held on the paper in rubbing tinware and spoons, they shine like new silver. For polishing mirrors, windows, lamp chimneys, etc., paper is better than dry cloth.

Black Paper for Drawing Patterns.—Mix some smooth lampblack and sweet oil; with a bit of flannel cover a sheet or two of large writing paper with this mixture; then daub the paper dry with a bit of fine linen, and keep it for using in the following manner:

Put the black side on another sheet of paper, and fasten the corners together with a small pin. Lay on the back of the black paper the pattern to be drawn, and go over it with the point of a steel pencil; the black paper will then leave the impression of the pattern on the under sheet, on which you must now draw with ink.

If you draw patterns on cloth, or muslin, do it with a pen dipped in a bit of stone blue, a bit of sugar, and a little water.

To Preserve Drawings on Paper.—A simple device for the preservation of cards, drawings or photographs from injury by being handled or coming in contact with moisture, consists of a preparation of gutta-percha in solution. The liquid is thrown, in a very fine spray, over the article by an atomizer.

When the liquid has in part evaporated, which it soon does, it leaves the object coated over with a thin, translucent film, impervious to water. The gutta-percha should be dissolved in chloroform or ether. The process of dissolving the gum is in itself purifying.

A drawing or photograph protected by this film can be washed with safety. The preparation softens at a temperature of 150 degrees Fahr.; but to this only a rare accident would subject it.

To File Papers.—To those who have no better method I would recommend getting two pieces of cardboard a trifle larger than the journal to be bound; then take a strip of canvas or thin leather as long as the cover sides, and three or more inches wide, and glue this on to the edges of the cardboard so that the latter may spread apart sufficiently to admit twenty-six numbers of a weekly, or twelve of a monthly. Now about three inches from the ends of the cover, and one-fourth of an inch from the edge next the back, punch holes large enough to admit a small cord, and the binder is ready for the file.

Punch holes in the papers as fast as received to correspond with those in the cover, and with a lady's shoe string fasten in each succeeding number, by tying the strings over the back with a bow knot.

A file of this kind will stand hard usage for years, and keep the papers in nice order. It is very simple, inexpensive, and may be made quite ornamental by covering the cardboard on the outside with handsome paper, and the inside with white. Black, red or blue leather makes a pretty back.

To Take Grease out of Paper.—Warm gradually the parts containing the grease, and extract as much as possible of it by applying blotting-paper. Apply to the warm paper with a soft, clean brush, some clear essential oil of turpentine that has been boiled, and then complete the operation by rubbing over a little alcohol.

To take Grease from Parchment.—To remove grease spots from parchment, cover with hot pipe-clay and place under pressure for a few hours.

To take Creases out of Paper.—If it is desired to remove a crease from an engraving which has been folded, slightly moisten the back of it, over which place a cloth and apply a hot iron. Similar wrinkles and creases may be taken out of a volume of papers that would otherwise be too imperfect for binding. Carefully sprinkle the pages at regular intervals (an ordinary wisp broom is good for the purpose), and then place them in a press or under some heavy weight; when dry they will be found smooth.

To Fix Pencil Marks..—To fix pencil marks so they will not rub out, take well skimmed milk and dilute with an equal bulk of water. Wash the pencil marks (whether writing or drawing) with this liquid, using a soft flat camel hair brush, and avoiding all rubbing. Place upon a flat board to dry.

Temporary Tracing Paper.—Sometimes it is convenient to have tracing paper only temporarily transparent, and to obtain this it is only necessary to wet the sheet in benzine. After a time the benzine will evaporate and the original condition of the paper will be restored to it. In this way a design can be transferred to any part of a sheet of paper without the necessity of employing regular tracing paper for the purpose. If the drawing is not completed, the requisite portion of the paper must again be damped with the benzine.

Paper for Fruit Jars.—Preserves and pickles keep much better if brown paper instead of cloth is tied over the jar; canned fruit is not so apt to mould if a piece of writing paper cut to fit the can is laid directly on the fruit. Paper is much better to put under a carpet than straw. It is warmer, thinner, and makes less noise when one walks over it.

Paper for Beds.—Two thicknesses of paper placed between other coverings on a bed are as warm as a quilt.

Paper for Chairs.—If it is necessary to step upon a chair, always lay a paper on it, and thus save the paint or wood work from damage.

PICTURES AND PICTURE FRAMES.

Spatter Work.—Procure a sheet of fine uncalendered drawing paper, and arrange thereon a bouquet of pressed leaves, trailing vines, letters, or any design which it is desired to have appear in white. Fasten the article by pins stuck into the smooth surface, which should be underneath the paper. Then slightly wet the bristles of a tooth or other brush in liquid India ink or common black writing ink, then draw them across a stick in such a manner that the bristles will be bent and then quickly released. This will cause a fine spatter of ink upon the paper.

Continue the spattering over all the leaves, pins and paper, allowing the centre of the pattern to receive the most ink, the edges shading off. When done, remove the design, and the forms will be found reproduced with accuracy on the tinted ground.

With a rustic wooden frame this forms a very cheap and pretty ornament.

Picture of Ferns.—Press and dry pretty ferns, then take a sheet of heavy white Bristol board twelve by fourteen inches, larger or smaller, as desired, for a background to the picture.

The ferns, with dried grasses and a few pressed flowers, can be arranged in nicely, leaving one and half inches of margin around both sides and one end. Inclose in a nice frame of walnut and gilt, and hang near the plant stand if you have one. A vine of the parlour ivy can stray to and twine around the cord that the frame is hung by, with pleasing effect.

Home-made Window Pictures.—Upon a square of white or delicately tinted Bristol board, says a lady correspondent, trace lightly some pretty designs, such as a bouquet a cluster of leaves and fruit, or a cross or an anchor, wreathed with flowers or leaves. Those of the former selected for imitation should be simple in form.

Among the most effective are passion flowers, lilies of the valley, roses and buds, sweet peas and apple blossom. Ivy or fern leaves are beautiful by themselves; or the former is, perhaps, prettier than anything except the passion vine, if twined about a cross. Bunches of grapes, currants or strawberries, each with a few of their own leaves attached, are very suitable. Having traced the design, lay the Bristol board flat on a block of hard wood, and with a thin bladed and very sharp knife, proceed to cut smoothly through as much of each outline as possible without entirely detaching any leaf or other distinct portion from the whole. One-fifth of a leaf left without cutting through will generally be found sufficient.

Sometimes judicious prickings with a coarse needle add to the good effect. The points of the leaves and of the petals of the flowers should next be passed through toward the window to admit the light and give the softly shaded effect we desire. The transparency can then be hung close to a window pane by means of narrow white ribbon loops at the corners secured to the wood work.

TO FIX DRAWINGS.—It is said this may be done cheaply, simply and without injury to the drawings by varnishing them on the back with an alcohol solution of white gum-lac. This solution quickly penetrates the paper, and enters even into the marks of the crayon on the other side. The alcohol rapidly evaporates, so that in an instant all the light dust from the crayons and chalk, which resembles that on the wings of the butterfly, adheres so firmly to the paper, the drawing may be rubbed and carried about without the least particle being affected. The following are the accurate proportions of the solution: Ten parts of common gum-lac are dissolved in one hundred parts of alcohol; the liquid is afterwards bleached with animal charcoal.

To Mount and Varnish Chromos.—Procure a piece of binder's or other strong pasteboard of exactly the size of the picture to be mounted. To this attach the chromo with any smooth paste. Do not use glue for this purpose as it is apt to soak through the paper. Care should be taken that the picture is laid perfectly flat and that all wrinkles are smoothed out.

When nearly dry, cover the face of the chromo with a weak size made of the best white glue. Over this, when dry, lay on varnish, which must be perfectly clear and pure. Chromos thus prepared will not need to be covered with glass for preservation, but may be treated in the same manner as oil paintings.

TO CLEAN CHROMOS.—When you clean them, use a soft feather brush or wipe them with a soft chamois skin (a drop of oil may restore clearness), or with a fine linen rag very slightly dampened. Always tenderly! Next, whenever the original varnish coating is dulled, bruised or rubbed, revarnish it with thin mastic varnish.

To Display Chromos.—Chromos, like oil paintings, should not be hung in a dark room, but in one with a diffused light, and never exposed to the direct rays of the sun. The chromos after water colours keep and display better when placed under glass, as they lack the protecting cover of the varnish. The larger chromos, after oil paintings, display, as a general rule, best when framed like original paintings. It is not *necessary* to put these under glass; it is a matter of taste—preserving them, at the same time, from dust and rough handling.

To Clean Engravings.—To clean and whiten engravings which have become dirty by hanging in a smoky room, soak in a weak, clear solution of chloride of lime until white, and then soak in running water. Steep for half an hour in water containing a very little hyposulphite of soda to neutralize any trace of adhering bleach, and dry between blotting paper under pressure.

A Medley.—Prepare your foundation by tacking muslin over a frame tightly. The muslin should be a clear white. Make a dim pencil mark around where the outer margin is to be, so as to make a mechanical finish. If a common centre is desired, paste around the outer edges first, till the centre is reached; if a plain view is desired, begin at top, passing in rows from left to right across the foundation; if a square frame is used, select a picture suitable for each corner; the upper row looks best with sky displayed.

Distance is better displayed by pasting only the lower half of the pictures; when the pictures are all pasted they will not appear in rows, as they vary so much in size; each row should lap more or less on each preceding row. Good gum or flour paste may be used to fasten the pictures on with. The latter is preferable if the paper is thin, as gum may show through.

To Clean Oil Paintings.—Cold water in some cases is all that is required to clean a painting. If this does not take hold sufficiently, add a very little alcohol or soap. Where soap is used rinse thoroughly by putting the picture under a stream of pure water, until all the soap is off.

To Restore Oil Paintings.—By lapse of time and physical and chemical changes, the paint loses in some degree its transparency, and the picture fades, those colours containing the least of oil changing the most. Pettenkofer has discovered that the vapour of alcohol will renew the qualities, and he restores old oil paintings by placing them over a tight box, in the bottom of which is a flannel cloth, which has been dampened with alcohol of eighty per cent. strength. The arrangement should be such that every part of the picture will be exposed to the alcoholic vapour.

To Transfer Steel Engravings.—Take glass that is perfectly clear (window glass will answer), clean it thoroughly, then varnish it on one side only, taking care to have it perfectly smooth, place it where it will be entirely free from dust, let it remain overnight, then take your engraving, place it in clear water until it is wet through, say ten or fifteen minutes, then lay it upon a newspaper that the moisture may dry from the surface and still keep the other side damp.

Immediately varnish your glass the second time and place your engraving on it, taking care to lay it on straight, press it down firmly so as to exclude every particle of air, then rub the paper from the back carefully until it is of uniform thickness, so thin that you can see through it; varnish the third time and let it dry in a room of moderate temperature.

Transferring Pencil Drawings.—Any kind of reasonably fine paper, either thick or thin, serves to receive the copy. Simply lay it upon the drawing board, then upon the face of the drawing paper lay the transfer paper, and upon the top of the lot lay the drawing, pencil marks upward, fasten the whole three sheets together and to the board by four drawing pins, one at each corner, then proceed to run over the pencil marks with a fine but dull pointed instrument. Use for the purpose a stocking darning needle with a handle, and the point ground off; and run over the marks same way as with a transparent slate.

If the drawing is not too thick and the carbon paper is good, a good copy may be obtained with care and practice. Copies are also taken by first perforating the picture with small holes along the marked lines with a needle, then afterwards laying it on the face of another sheet of paper, and rubbing it over with powdered black lead; the black lead goes through the holes and leaves a dotted outline beneath. A pencil is afterwards run over the marks and a fair copy is produced, which can be quickly multiplied

Photo-Enamel Work.—The first step to be taken in preparing the picture is to soak it off the card, if mounted, and care should be taken that it gets perfectly dry before putting on glass. Make a paste, using about fourteen teaspoonfuls of water to one of starch, boil until perfectly transparent, spread on both picture and glass, take two thicknesses of good wrapping paper and put on the back of the picture, changing as soon as the paper becomes sticky; work)ut the paste carefully and thoroughly from the centre of the picture, let it get perfectly dry, and then fill it with castor oil.

Let it remain until perfectly transparent, pour off the oil, and dry with a soft sponge, being very careful not to injure the picture. It is now ready to paint. Paint the eyes and jewelry on the photograph side with water colours. Cover this with another glass and paint with oil colours all other parts, having put small pieces of cardboard on all sides of the second glass to keep them separate.

Use the coloured paper for back that will harmonize best with the picture. There are several ways that the work can be done quicker, but none, I think, superior to this, if directions are followed closely. Use the paints right from the tubes.

Perforated Cardboard Frame.—Cut from your perforated paper two side pieces and two end pieces of the length and width you wish your frame to be; allowing for projecting corners, as they are much prettier than plain. Notch the ends, lay them in the proper form, and tack slightly at the crossing-places with fine thread.

Then cut four more pieces, one row of perforations smaller all around; lay these upon, and exactly in the middle of the others and tack as before. Continue this, making each layer smaller by one row of holes all around, until a width of only two or three rows is obtained. The last layer, perhaps the last two, are better gummed on than sewed. Some use gum water altogether.

These frames are strong enough to support a light glass—fitting it neatly in at the back—if a glass is desired. After the picture is in place, paste strong paper over the back, which will give it firmness. A fancy button or other ornament sewed on at the corners will make a neat finish to the frame.

These frames may be made varying from one inch to an inch and a half in width, according to the size of the picture and the strength required. Coloured paper is preferable to white, when it can be procured. Wood colour is very pretty, also various shades of brown. Green and straw colour look well for landscapes.

Rose Leaf Picture Frames.—The leaves of the multiflora or climbing rose are best suited for this purpose, as they have a greater richness and variety of colour than most of the rose family. At the time that there is the greatest variety of coloured leaves, strip them from the bush and put them to press in any old book you do not wish to use; change them as often as every other day until sufficiently dried.

Take any picture you wish—an engraving is generally used—very pretty, though small ones may be found in magazines, ladies' books, etc., larger ones are usually purchased at bookstores—tack on to a pasteboard which will leave a margin the width you wish for your rose leaf frame, outside the engraving. Fasten the leaves on to the pasteboard frame either in knots or groups, or singly, overlapping each other, and varnish. When dry, suspend with cord and tassels, and you have a very pretty picture.

USE FOR OLD FRAMES.—Old picture frames that have became defaced, may be used as the foundation for shell frames. Scrape off the old varnish as much as possible, and then take shells, small nuts, beans, cones, pebbles, seeds, pits of fruit, etc.,and arrange them upon the frame to suit the taste. The largest cones or nuts look best at the corners and in the middle of the sides. Fasten them on with stong glue, and when firmly set give all a coat of varnish.

ORNAMENTS FOR FRAMES.—Mix whiting with thin glue to the consistency of putty. Have the mould ready; rub it over with sweet oil and press the composition into it. When a good impression is produced, take it cut and lay it aside to dry. If it be desired to fit the ornament to a curved or irregular surface, apply glue and bend it to the place where it is to be attached before it gets dry.

TRIMMING PICTURES WITH VINES.—By placing a wedge-shaped can, filled with good soil, behind a picture English ivy may be grown vigorously, and while the rootings are out of sight, the vines may be made to twine at will. The effect will be most gratifying. If the picture is so located that the can may be seen at a certain part of the room, it may be painted or papered so as to be ornamental itself.

FASTENING SHELLS TO FRAMES.—Where shells are to be put on a box or frame close together, glue may be used, but where they are not so closely together but that the base can be seen between them, a cement made of white paint or putty should be employed.

Take whiting and oil or putty as bought at the shop, and a little chrome green; mix and pound it with a hammer until there are no streaks of green or white in it; have it just thick enough so it will not run; then spread it smoothly over one side of the frame a little less than one-eighth of an inch thick; put on the things, and then spread putty on another side. When the frame is dry, varnish it, and when it is thoroughly dry it will be as solid as any one could desire.

REPAIRING GILDED FRAMES.—Very often gilded picture frames become damaged either by bruises or the plating cleaving off from the plaster foundation, which makes them unsightly. Now, if taken to a picture store, you will be told that there is no remedy, as they cannot be repaired, so don't take them.

Buy a small paper of bronzing or gilding dust, and after applying a little varnish to the damaged part of the frame, dust on a little of the gilding material through a cloth and let it dry. It of course will not make the frame as good as new, but the white unsightly place will be covered up and not be detected unless closely examined.

There is a gilding powder which comes in a small bottle, with a second phial of liquid for wetting, which is far superior to the first mentioned. It is called "gold paint," and is certainly a very excellent thing for fresh gilding or repairing damaged articles that have been gilded.

CORN HUSK PICTURE FRAMES.—Take a piece of cardboard large enough to leave from four to five inches margin after cutting a square place in centre large enough to expose the picture to be framed. Next, take fine white husks—not those thin like tissue paper—cut into strips half or three quarters of an inch wide, according to the size of the picture, make them three inches long, then double over, forming a loop, and bring the ends together. Fasten two rows of these loops clear around the edge of the opening in the cardboard. Begin sewing on at the upper left hand corner, cross the top and down the right side, then begin at upper left hand again and go down and cross the bottom, either lapping over at the crossings, or cutting off closely, so that there will be a good match. In putting on the loops, of course one is laid overlapping the other, shingle fashion, just so that the loops touch each other. After these two rows have been completed, cut some more husks full width and three inches long; double into loops as first, then slit them with a fine needle and sew on a double row the other way, *i. e.*, across the frame at right angles with the first, the fine loops overlapping the other a little. Now put on two rows around the outside upon the ends of the shredded ones, in the same order as the first. These also should be split up fine with the needle and cut of uniform width. As the middle rows run sidewise around the frame instead of endwise they can be put on full or any width. Trim edge smooth, cutting cardboard up close to husks, then take a thin piece of board to make a frame. Place your glass and picture between your paper frame and your board frame, and tack or paste your paper frame down smoothly. You will thus have a very pretty rustic frame. Reject stained husks.

To make Picture Nails Hold.—Sometimes a good deal of trouble is experienced in getting nails to hold in a plastered wall, just where they should be to allow the pictures to hang at a given point, or exactly between two casings. If neither nail nor screw can be driven to hold, make the hole by use of a gimlet larger than is required for the nail; then fill the hole with plaster of Paris wet with salt water, and insert a screw by turning it carefully in; then finish the job with a pocket knife blade, forcing in as much plaster as possible, but do the work rapidly, as the plaster will set quickly and hold firmly.

THE ARRANGEMENT OF PICTURES.—It is often impossible, in small parlours and sitting-rooms, to give each picture precisely the light which would show it to best advantage, therefore a careful distinction should be made. It is seldom well to hang a sombre picture in a broad light, or a cheerful, sunny one in a shaded corner. A moonlit landscape or a night storm at sea are better placed in a mild light, while a group of laughing children or a harvest scene seem naturally to require a strong one.

If there is one picture considerably larger than the others, it should have the widest vacant space on the wall, provided the space is at all suitable for it. Companion pictures should be near together or—which often has a better effect—placed each side of a window. The space between two windows, if not occupied by a mirror, is very nice for a gilt frame picture of good size; dark frames look better in a more subdued light.

GROUPING PICTURES.—In grouping, regard should be had to the size, shape and colour of frames, and to the subject of the pictures. Oval forms are preferable to square for grouping, though the rustic or "log cabin" frames, with projecting corners, hung in triangle or diamond forms, often look extremely well.

Three pictures of the same general appearance, hung in a horizontal row—about half the width of the picture is considered a proper distance between them—with two smaller above, and the same below, matching the spaces, and making seven in all, are a very convenient and common form. Or if the central piece is larger than the others the effect is equally good.

Two ovals, one above the other, with a smaller rustic or square frame each side, matching the vacant space, look very well; or *vice versa*, the ovals outside. Many arrange pictures to represent crosses, but care should be taken not to overdo the cruciform style. I have seen parlours in which this symbol was so often and so incongruously introduced that it seemed shorn of its best significance.

It is well, when convenient, that those pictures which correspond in position should be nearly uniform in size and in general aspect. But this is not all important, and considerable variety may be made very pleasing, especially if the cluster be composed of quite small pictures, like card photographs in tasteful frames.

Do not allow too much incongruity in the expression of the group. If one arm of your cross, or one point of your diamond is a Madonna or a crucifixion, do not let the corresponding one be a Bacchus crowned with vine leaves, or a jolly washerwoman! A rural landscape accommodates itself to almost any place; so does an infantile face or a garland of flowers.

PROPORTION IN MARGINS IN PICTURES.—A cabinet-maker gives the following rules for comparative space between the subject and frame: First, find a harmonic third to the length and breadth of the print and take it for the collective widths of the margin and frame. Second, divide this space harmonically, so that the whole space and the greater and smaller parts of it are three successive harmonic terms and you have then taken the less part for the margin and the greater part for the frame. The eye should be more of a guide than mathematics in finding the proper widths of margins in pictures and frames. Oil paintings and chromos have no margins, and these have deep frames of gilt or gold. Steel engravings look well with flat dark frames, as they have white margins. A small oil painting requires a proportionately deeper frame than a large one.

RUGS.

Imitation Moss.—In making rugs, two important points must be considered—the amount of work and time required. In these days, when quite handsome rugs can be purchased for a small sum, it does not pay a woman to spend all of her spare time for weeks and weeks over a rug, even if the materials do come out of a rag bag and therefore cost nothing: The drawn coffee sack rugs in figures of cats, dogs, bouquets, etc., the rugs made of scores of small circles of cloth hemmed on each other, and many other kinds are open to this objection.

Imitation moss rugs are among the handsomest of home manufacture. Take a quantity of old white or light yarn hose, nubias and knit shawls, and dye them in shades of green; ravel out and sew in small bunches or tufts on a stiff foundation.

CLOTH.—A pretty cloth rug is quickly made of pieces four inches square, doubled once diagonally and gathered to form a leaf, and sewn on a piece of hemp carpet or stiff canvas. Begin at the edge and sew around, concealing the raw edges in the centre with a small cross or diamond of tufted yarn or wool. Drab and blue, or green and crimson, combine well in these rugs.

WOOL.—Wool rugs are made of wool dyed in various colours and sewn on coffee sacks or other foundations with coarse thread, taking care to conceal the stitches. The rug may be in one, two, or more colours, and in whatever figures one chooses to design.

COFFEE SACK.—Select coffee sacks that are of even texture, and have them washed and ironed smoothly;

or, if you prefer, buy the same material by the yard, which will be still better, as it will be clean and with the original stiffening. The rug must be cut of the desired size, allowing for the fringe, and then worked in cross stitch with coarse wool, just as one would work on Java canvas.

Some rugs are very handsome when done with a Persian pattern, and if preferred, the designs may be made very pretty by introducing an applique centre of scarlet, crimson, blue or green cloth or flannel, button hole stitched to hold it down.

The edge is fringed out in the usual way, being secured by the button hole edge. The more it is worked the handsomer it will be, and even for a table cover for a common stand or centre table the effect is excellent, and it will be found very durable.

Chenille.—Chenille rugs may be made from old bits of all sorts of bright and neutral tints of woollen, silk and cotton, which are usually considered fit for nothing but the rag bag. Cut these in small bits, of almost any shape, as their form will allow (though it is better to cut them nearly square, if you can); take a coarse needle and strong linen twine, double in long needlefuls and string these bits of rags.

After the string is full, take some shears and trim off the ragged edges, so as to make the roll as round as you can; when you have enough string, take a piece of tapestry or Brussels carpeting for a centre, and sew on the edge a strip of your chenille; then, on that another strip, and so on, just as you do braided mats.

Carriage.—For carriage use, rugs are made of heavy burlap canvas, coloured gray, brown or black, and embroidered in showy patterns with coarse Germantown wool in long cross stitches. A ravelled fringe finishes the edges. To make it sufficiently heavy a strip of burlap of rather more than twice the width of the fringe is folded through the middle, ravelled on both edges and sewed under the fringed edge of the rug.

Scrap.—A lady writer directs to take a piece of hemp sacking, and draw some pretty design in the centre—a bouquet of flowers, a wreath or some animal—mark a border with a chain or heraldry pattern; sew the canvas into a frame like quilting frames, only smaller, so as not to occupy too much room. Have a hook made like a crochet hook or needle; one can be manufactured easily by taking a parasol brace or a piece of wire and filing the end into a proper form. Cut the scraps of cloth into strips of half an inch in width—if thin fabric make it wider—pass the hook downward through the canvas with the right hand; have the cloth underneath the frame in the left hand; insert a loop on the hook and draw it to the upper side about three-fourths of an inch.

Leave about three threads space and close in another loop; regard the selection of colours so as to shade them nicely, and keep the form of your pattern—it is very quiet, easy and fascinating work. Work the figures first, and then draw in the filling up, or groundwork, with some dark colour—black, brown or drab; after it is completed, shear the whole surface evenly, but not too close, and you have a fine, substantial, durable rug that will last a lifetime, and do more service and be prettier than any imported article that would cost anywhere from twenty to thirty shillings; and the best of all is, that it is home-made.

Skin.—Sheep skins dyed, and fox and calf skins tanned, make warm, convenient rugs for winter use. Line them with black cloth and stitch narrow, pinked strips of red or blue cloth around the edge.

Yarn.—Yarn rugs for common use may be made of old woollen stockings. Make your foundation of burlap; cut your stockings in strips, about one and a half inches wide; ravel them, leaving about one-fourth of an inch for sewing on to the foundation. Begin at the outer edge, and sew around the rug the unravelled edge of each row, just covering the part sewed on of the preceding one. Take Etruscan cloth or Turkish towelling, cut in any shape you like; cut out figures, of thick flannel or bright coloured cloth, and button hole stitch them on with worsted or fine yarn; cut a border of some pretty design; put it on in the same way, and either bind the edge or trim with short, heavy fringe. By using a foundation of old, but strong white cotton, lined with something firm and durable, and putting on figures of black and bright coloured cloths, and trimming the edge with a strip of black cloth scalloped, a very pretty rug may be made.

RUG OF CARPETING.—The most easily made rugs, and perhaps as satisfactory as any, are of pieces of carpet, bordered. The carpet may be doubled or lined and quilted. The border may be of coarse embroidered or applique work, or of braided cloth, or of bits of rags drawn through coffee sacks, or like any of the above described kinds of rugs.

FRINGE FOR RUGS.—Handsome fringe for rugs can be made of coarse Germantown wool or of yarn. Strips of woollen cloth two or three inches wide, and cut fine across, will answer very well for fringe, where two or three thicknesses are sewed together.

HOME-MADE PERSIAN RUG.—A description of a very cheap and very pretty rug is given by the *Ladies' Manual.* It directs to get from some carpet store a supply of strips of tapestry Brussels carpeting; pieces that are too small to be worked up into hassocks are quite large enough for the purpose. Cut these into strips of any length their size allows, but let them be of uniform width, say three inches. Ravel these all out, rejecting the linen, and collecting in a box the little crimped worsted threads.

Provide yourself with a pair of the largest size steel knitting needles and a ball of the coarsest crochet cotton, either white or coloured. Set on ten stitches, and after knitting a row or two to make a firm beginning, go on as if you were making a garter, but with every other stitch lay a thread of crimped wool across the needles. After knitting the stitch, take the end of wool which shows upon the wrong side, and turn it towards the right side, knitting a stitch above to secure it. Then put in another thread of wool and repeat the process. The back of the strips should have something the appearance of that of a body Brussels carpet, while the front should be like a sort of thick, long napped plush.

The colours may be used without selection, making a sort of *chene* effect; or carpets may be chosen for ravelling which show only shades of scarlet or blue; or brown carpets may be used for the centre of the rug, and a border of scarlet or blue sewed on all around. After doing a little of this work, many ideas as to arrangement of colours will suggest themselves, and a little practice will enable the knitter to produce some very pleasing results. When the strips are all finished they must be sewed together at the back. It is only for convenience that they are knitted in strips—the rug, as a whole, would be very cumbersome and unwieldy to handle. Some ladies edge a Brussels or velvet carpet hearth rug, with a strip of this knitting, thus giving a very pretty finish. Small mats for placing in front of bureaus are also very pretty made upon the same plan.

STAINS.

Smoke Stains.—An easy and sure way to remove smoke stains from common plain ceilings, is to mix wood ashes with the whitewash just before applying. A pint of ashes to a small pail of whitewash is sufficient, but a little more or less will do no harm.

Broadcloth.—Take an ounce of pipe clay, which has been ground fine, mix it with twelve drops of alcohol and the same quantity of spirits of turpentine. Whenever you wish to remove any stains from cloth, moisten a little of this mixture with alcohol and rub it on the spots. Let it remain till dry, then rub it off with a woollen cloth, and the spots will disappear.

Stains of Fruit from Linen.—Moisten the cloth and hold it over a piece of burning sulphur, then wash thoroughly, or else the spots may reappear.

Oil Stains.—Take three ounces of spirits of turpentine, and one ounce of essence of lemon; mix well, and apply it as you would any other scouring drops. It will take out all the grease.

Iron Stains.—The part stained should be re-moistened with ink, and this is removed by the use of muriatic acid, diluted with five or six times its weight of water, when it will be found that the old and new stains will be removed simultaneously; or:—

Iron stains may be removed by the salt of lemons. Many stains may be removed by dipping the linen in sour buttermilk, and then drying it in a hot sun; wash it in cold water; repeat this three or four times; or:—

Squeeze lemon juice into a cup, add a pinch of salt, and rub the stain in this. Then wash in clear, tepid water. Sponge goods that cannot be rubbed. Lay in the sun until dry. Repeat the application, if necessary, until the stain is removed. With some blacks the matter might be made worse. A piece of the material having iron rust should be tried first.

OIL STAINS FROM WOOD.—Mix together fuller's earth and soap lees, and rub it into the boards. Let it dry and then scour it off with some strong soft soap and sand, or use lees to scour it with. It should be put on hot, which may easily be done by heating the lees; or:—

Pour one teaspoonful of turpentine on the spot and let it remain five or ten minutes, then take one tablespoonful of soft soap and spread over the spot, let it remain a few minutes, then pour on boiling water, scrub with a brush broom, wash and wipe dry—if the grease has not disappeared, repeat the process, or mix together fuller's earth and soap sediment, and rub it into the boards; let it dry, and then scour with soap and sand.

SCORCHED GOODS.—If the scorch is not an absolute burn, it may be removed by boiling the fabric in milk, turpentine and soap. To half a gallon of milk use half a pound of soap and half a teacupful of turpentine. Be careful about exposing turpentine to fire.

INK FROM CLOTH.—Ink may be removed from cotton, silk or woollen goods by saturating the spots with spirits of turpentine, and let it remain several hours; then rub it between the hands. It will disappear, it is said, without injuring either the colour or the texture of the article; or:—

The moment you spill ink, take a little milk and saturate the stain; soak it with a rag and apply a little more milk, rubbing it in well; in a few minutes the ink will be completely removed.

INK FROM LINEN.—A good way to take ink out of linen is to immerse the part that has ink on it in boiling hot tallow. When cool wash out in soap suds, and it is said the linen will be as white as ever.

STARCH.

To Make Potato Starch.—Housewives usually much prefer to purchase starch than to make it; but sometimes circumstances are such that it would be convenient to understand the methods of obtaining this material from vegetables and grain. It may be made from both potatoes and wheat. To make it from the former, wash the potatoes very clean, grate fine, wash as much as possible, and strain the whole through fine muslin, using plenty of water.

Let the starch settle to the bottom of the vessel until the water becomes clear and free from a white cloudiness; then pour off the water carefully, and you will find the starch in a hard mass at the bottom of the vessel; there will most likely be a little slime and impurity on the surface of the starch; this must be carefully removed and the surface of the starch rendered clean.

When the starch is well cleaned, stir it up again in pure fresh water, and let it settle again. When the water is clear, pour it off, and your starch will be as pure as driven snow; if it should not be, wash it up again.

When quite bright and clean, take the starch out, make it up into small parcels with the hands, or pour it into cotton bags containing about a pint, and slightly tapering, until the water has all drained out of it; then turn it out of the moulds, cut it into pieces about three inches square, and set them on new, clean, dry bricks; the bricks will absorb all the remaining water.

Let them remain on the bricks until the starch loses all appearance of wetness; then place it in the sun, where there is a good current of dry air, and it will fall into crystals, more or less perfect, and will then keep any reasonable length of time for use.

To make Wheat Starch.—This is made as follows: Take a quantity of the best wheat, soak it in water until soft, then crush it on a smooth board until all the grains have burst. Do this little by little; the wheat must be quite soft, so as to yield its substance when pressed; it will be quite sour and offensive, and yet it is not at all unwholesome.

When all is crushed, let it remain mixed with water in a thick state, like cream, until it is quite sour. Then wash it in small portions at a time, in a very fine sieve; the starch will all go through with the water, and the bran may be thrown away. When all is done, give it a good stir up in the vessel, and then let it rest; the starch will all go to the bottom in a hard cake.

When this has taken place, which will be in about twelve hours, draw off the water through holes in the sides of the vessel, taking care not to disturb the contents, and also taking care not to go below the clear; when the water is all off, you will find all the gluten and impurities of the wheat in a thick coating on the starch.

This substance is removed from the surface of the starch, and the surface washed off; the starch is then roused or mixed up with fresh water, and allowed to settle and again cleaned off.

When bright clean and sweet, the starch must be taken out and placed in cotton bags, as in making potato starch; the water then runs off; leaving the starch so hard that it will turn out of the mould, and the cloth being removed the starch may be cut into cakes, and dried in the sun; it will fall into crystals, and is then fit to be put away for use. If the starch does not come pure and nice, it may be known that the muslin sieve was not fine enough.

Another Formula.—Another way to make wheat starch is to have the wheat ground, but not boiled. Put it to soak in plenty of water and let it ferment; then put in thin bags and squeeze them until all of the milky substance is forced out and nothing but the bran left. If you choose, the bran may be soaked and pressed again. Strain the white fluid through heavy cloth like a blanket; let the starch settle and pour off the water carefully. Add more water, stir up, and allow to settle again. Repeat the pouring off, and continue these operations until the starch is white and solid. Cut into cakes and dry on plates in the sun.

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ne oz White wax. 1 oz of beeswax
1 oz Castile soap. a 1/4 pint-
of turpentine 3/4 pint- boiling
water. The soap & waxes to be shredded
nely. covered with turpentine &
left. till next. day. The mixture
should then be beaten with a
iece of wood & the boiling water
dded by degrees. When there are
o lumps & the cream is quite
Soft. & smooth, it can be put into
bottle —

Best all round breed poultry.

Orpington, Wyandotte, Langshan
(Croad variety)
Faverolles. Plymouth Rocks —

A Sun dial Globe
Newton & Co. 3. Fleet-Street;
E.C.